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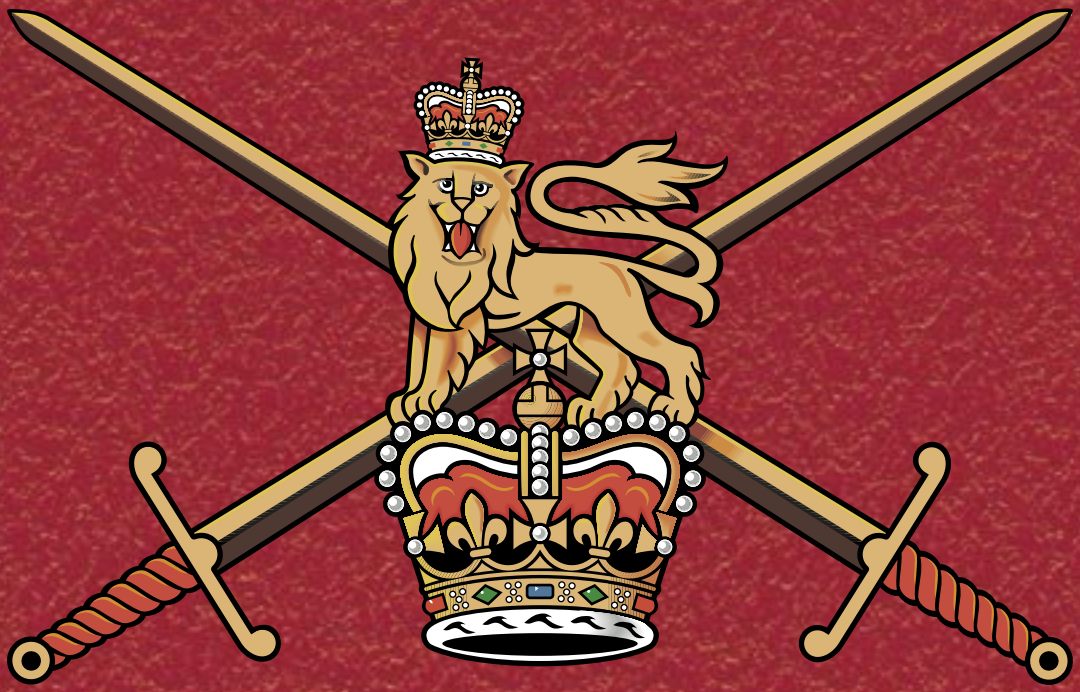

ARMY

ARMY DOCTRINE PUBLICATION
LAND OPERATIONS

DIRECTORATE GENERAL DEVELOPMENT AND DOCTRINE

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This publication replaces:

AC 71451	*Design for Military Operations. The British Military Doctrine*
AC 71565	Army Doctrine Publication Volume 1 *Operations*
AC 71564	Army Doctrine Publication Volume 2 *Command*
AC 71566	Army Doctrine Publication Volume 3 *Logistics*
AC 71700	Army Doctrine Publication Volume 3 *Logistics – Medical Supplement*
AC 71621	Army Doctrine Publication Volume 4 *Training*
AC 71642	Army Doctrine Publication Volume 5 *Soldiering*

ARMY DOCTRINE PUBLICATION
'LAND OPERATIONS'

PREPARED UNDER THE DIRECTION OF
THE CHIEF OF THE GENERAL STAFF

DIRECTORATE GENERAL DEVELOPMENT AND DOCTRINE

MAY 2005

FOREWORD

The publication of *British Military Doctrine* in 1989 broke new ground in the British Army's understanding of its profession. For the first time the Army had an explicit description of the overall philosophy and principles by which it should operate. The subsequent publication of the *Army Doctrine Publication (ADP)* series in the mid-1990s provided a broadly complete, coherent and consistent understanding of land operations, linking philosophy and principles to the practices and procedures that had been (and still are) contained in tactical handbooks and pamphlets.

Much has changed over the last 10 to15 years. We have learned lessons from operations in the Middle East; the Balkans; and elsewhere, including those against international terrorism. A body of United Kingdom joint doctrine now exists, reflecting a greater emphasis on joint and multinational expeditionary operations. In addition, the Army can benefit from insights into the dynamics of land operations from analysis not previously available.

ADP *Land Operations* describes how the British Army operates and fights. It provides the philosophy and principles for land operations. It is intrinsically linked to high-level joint doctrine. It provides the authoritative guidance and framework for practices and procedures described in other Army doctrinal publications. It concentrates on land tactical operations, since strategic and operational doctrine are described in Joint publications. It is intended to be read as a single, continuous narrative.

Much of its content is enduring and will be familiar from previous publications. The warfighting ethos, the manoeuvrist approach and mission command remain keystones of our doctrine. What is new is a description of how and why that body of doctrine is important, and particularly the stress on the importance of shock and surprise in attacking the enemy's will and cohesion in land combat.

Fundamentally, doctrine is 'what is taught', and is not a matter of personal opinion. However, to be effective doctrine needs to be read, understood and adhered to. Judgement and skill are required in its application. Above all, a pragmatic approach needs to be taken on operations. Commanders, staff officers and those dealing with the profession of arms should all become familiar with the contents of ADP *Land Operations*, which I commend warmly.

General Sir Michael Jackson
Chief of the General Staff

May 2005

PREFACE

"The central idea and purpose for an army is its doctrine, which has to be based on the principles of war, and which to be effective has to be elastic enough to admit of mutation in accordance with change in circumstance. In its ultimate relationship to the human understanding this central idea or doctrine is nothing else than common sense – that is, action adapted to circumstance."

Major General J F C Fuller[1]

1. This Army Doctrine Publication (ADP) is the primary source of United Kingdom land force doctrine. It provides philosophical guidance and the principles required to plan and conduct operations in a joint and multinational framework. Its approach and terminology are consistent with its sister NATO publication Allied Joint Publication (AJP) 3.2 *Allied Land Operations* and joint publications, particularly Joint Warfare Publication (JWP) 0-01 *British Defence Doctrine* and Joint Doctrine Publication (JDP) 01 *Joint Operations*. Unless otherwise specified, all definitions used in ADP *Land Operations* are derived from AAP-6 *NATO Glossary of Terms*.

2. The ADP examines the dynamic of land conflict in accordance with the following structure:

Chapter 1 describes the purpose, functions and levels of doctrine, establishing a framework of understanding linked to the conceptual component of fighting power. It considers the levels of warfare, analyses the nature of land combat and then describes military activity within the continuum of operations.

Chapter 2 describes the British approach to the conduct of land operations considering victory, success and end-states including the limitations on the application of armed force. It explains the philosophy of the effects-based approach and the application of the Manoeuvrist Approach to land operations, focusing on attacking an enemy's understanding, will and cohesion.

Chapter 3 describes the main aspects of British land force doctrine. It considers in turn, the functions in combat, the core functions, the operational framework and types of land operation.

Chapter 4 examines the place of land forces in the joint campaign. It considers air/land and maritime/land operations as well as other elements and enablers. It then looks at the nature of multinational and coalition operations and their impact on command, and the inter-agency dimension.

Chapter 5 considers the sustainment of land operations. It articulates the principles before examining each of the functional areas involved. It then considers the factors involved in sustaining land operations.

Chapter 6 describes the philosophy and principles of command of land forces. It considers Mission Command, the role of the commander, and how command is exercised and supported.

Chapter 7 considers the moral component of Fighting Power. It examines the ethical base on which the Army operates, considering moral and legal considerations which underpin

[1] Major General J F C Fuller, *The Foundations of the Science of War* (London: Hutchinson & Co, 1926).

the decision to employ military force. It then looks at motivation and how it is sustained through leadership, man-management and discipline. Finally it considers the question of cohesion, values and standards, loyalty and comradeship.

Chapter 8 examines how fighting power is prepared and generated. It describes the path between those activities and describes the factors which contribute to their success.

3. A number of historical illustrations are included within yellow boxes. In addition a small number of topics are considered in blue boxes. They cover issues which are the subject of conceptual discussion at time of publication. Neither the historical illustrations nor the conceptual material are intended to have the authority of doctrine.

4. ADP *Land Operations* replaces the following publications:

AC 71451	*Design for Military Operations. The British Military Doctrine.*
AC 71565	Army Doctrine Publication Volume 1 *Operations*
AC 71564	Army Doctrine Publication Volume 2 *Command*
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5. Army Doctrine Publications are published and distributed by DGD&D on behalf of CGS. All doctrine publications may be found on the British Army Army Electronic Battle Box (AC 71632 [CD ROM version] AC 71632Z [DVD version]) and on the DGD&D website (which should always be checked for the most up to date versions) at http://www.baebb.mod.uk.

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CHAPTER 1

THE EMPLOYMENT OF MILITARY FORCE

The purpose of Chapter 1 is to set the context for the doctrine contained in this publication. It considers the purpose and levels of doctrine, establishing that it provides a framework of understanding linked to the conceptual component of Fighting Power. The chapter then discusses the levels of warfare, analyses the nature of land combat and describes military operations on land within the continuum of operations.

1.1 Doctrine

Purpose

0101. Doctrine is 'that which is taught'. Military doctrine is defined as 'fundamental principles by which military forces guide their action in support of objectives. It is authoritative, but requires judgement in application'. Doctrine does not constitute a set of rules to be applied without thought but seeks to guide, explain and educate. It provides the basis for study, training and informed discussion.

0102. Doctrine is the body of thought which underpins the development of Defence policy. It is informative whereas policy is essentially prescriptive. Doctrine has its foundation in history and theoretical analysis, and derives its authority from being the distillation of much hard-won experience. Therefore it is enduring but not unchanging. Doctrine evolves in response to changes in the political or strategic situation, in the light of experience, or as a result of new technology. In turn, it influences the way in which policy and plans are developed, how forces are organized and trained, and what equipment is procured.

The Levels of Doctrine

0103. Doctrine is written both to impart understanding and to deliver instruction. The higher levels of doctrine establish the philosophy and principles underpinning the approach to military operations. The function of such doctrine **is to establish a framework of understanding for the employment of military force and so provide the foundation for its practical application**. The lower levels of doctrine describe the practices and procedures for applying armed force. Doctrine has four conceptual levels, shown in Figure 1.1.

OVERVIEW

0104. Philosophy is conceptual, enduring and pervading. It is largely *descriptive*. Principles are more specific and are often listed as short statements, such as the Principles of War. Practices describe the ways in which force is applied. Procedures are intended to be *prescriptive*. They describe how lower-level activities, such as employing a weapon system, should be conducted. In this sense, tactics are practices for the application of force. Hence 'tactics, techniques and procedures' describe lower levels of doctrine. These levels of doctrine do not equate to the levels of warfare - there are joint operational procedures, just as there are land tactical procedures. Similarly, aspects of philosophy and principles, such as the philosophy of mission command, apply as much to a corporal as to a corps commander.

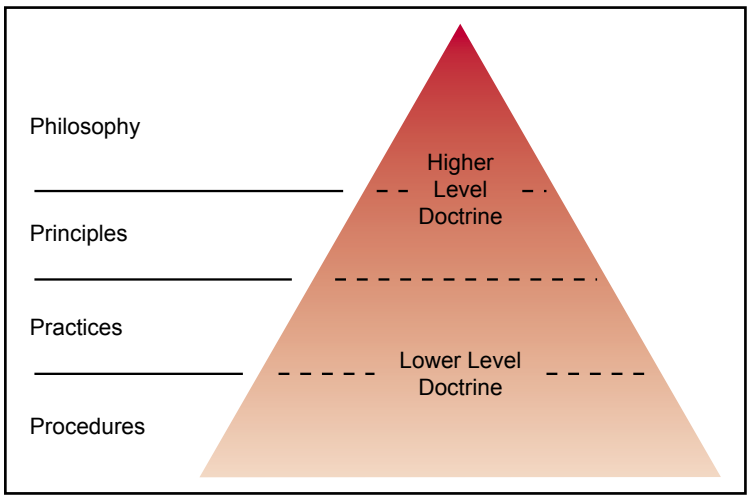

Figure 1.1 – The Levels of Doctrine

British Army Doctrine

0105. ADP Land Operations is the primary source of United Kingdom land force doctrine. It provides philosophical guidance and principles required to plan and conduct land operations within a joint and multinational framework. It expands and applies the principles of national and NATO joint doctrine within land forces, as explained in Annex A. The approach and terminology is consistent with its sister NATO publication, AJP-3.2 Allied Land Operations. It describes how the British Army operates, primarily at the tactical level within the context of a joint campaign or major operation. It encompasses doctrine for achieving success through combat. To do so, it describes how the British Army expects to fight and win engagements and battles, and how to achieve success when fighting is not appropriate.

0106. Responsibility for the development and dissemination of Army doctrine rests with the Director General of Development and Doctrine (DGD&D) on behalf of the Chief of the General Staff. Supported by the Directorate of Land Warfare, and advised by the Army Doctrine Committee, he is also responsible for supporting the development and dissemination of NATO and ABCA land force doctrine and concepts. The Land Warfare Centre is responsible for the development of lower-level combined-arms tactics, techniques and procedures. Its work is guided both by the Army Doctrine Committee and the Land Tactical Doctrine Committee.

1.2 Fighting Power

0107. Fighting Power consists of a ***conceptual component*** (the thought process), a ***moral component*** (the ability to get people to fight) and a ***physical component*** (the means to fight). The conceptual component is pre-eminent - both the moral and physical components are derived from it. Historically, flaws in an army's conceptual approach have tended to have more impact on operational effectiveness than deficiencies in moral or physical components.

0108. An ***understanding*** of the complex, chaotic and potentially confusing environment of land conflict lies at the heart of the conceptual component. The ability to visualize the interaction between friendly and enemy forces is inherent in that understanding. Understanding how to impose

one's will on the enemy is also required. The ***Principles of War*** guide the conduct of operations generally and land operations in particular although they are not unchangeable. Armed forces should ***develop*** their understanding of the conceptual component over time, and doctrine should evolve as a result. This is a significant challenge and the price of failure can be high.

The Bagnall Reforms

The 1980s were significant in the British Army's conceptual development of operational art and the Manoeuvrist Approach. This was largely due to Field Marshal Sir Nigel Bagnall, commander of 1(BR) Corps and later NORTHAG. As an Army Group Commander facing the possibility of massed Soviet attack, Bagnall explained the need for such ***conceptual development****:*

Main Defensive Battle: It is here that we must seek to halt the enemy advances. All the corps have been told to conduct the battle within their own corps area and have been given a coordinating line behind which they are not to withdraw without authority. Currently this instruction is interpreted in different ways in the four corps, without an overall design for battle at the Army Group level … National planners and analysts tend to focus on the requirements within their respective corps areas, with scant regard being paid to what the overall battlefield requirements are. Let me give you two examples. The British Corps, having being schooled for years in the restrictive thinking of a static defence concept brought about by an over-literal interpretation of forward defence, encase themselves in minefields. The German Corps, on the other hand, have placed far less dependence on minefields but perhaps because they have not seriously considered the need for offensive action under present plans, have no minefield breaching capability … This unsatisfactory situation must be rectified. Soviet thrusts are not going to be obligingly directed at individual corps but will spill over into neighbouring ones. In fact, even a cursory map study suggests that at least one major Soviet thrust would be directed along what is an inter-corps boundary. This consideration alone portrays the needs for the Army Group to fight a coordinated battle and not four separate corps ones.

There is then the problem of tactical doctrine. As I have just pointed out, we must decide whether we are to fight a basically static battle or should we put more emphasis on mobility? To adopt a static defence entails an approximately equal dispersion of strength along the army group front, whereas the Soviets can concentrate to attack at selected points. You do not have to be a military genius to see the consequences.

We have then got to be prepared to fight a more mobile battle so that we can achieve a concentration of force at critical points, and when I talk about concentration of force, of course I include air power. If we can achieve this, two possibilities are open to us. First we could achieve a local tactical success which would enable us to seize the initiative. Secondly, I do not believe the Soviets will be capable of launching the massive and fully coordinated offensive with which we credit them. There will be mistakes, faulty staff work and Murphy's Law will lead to traffic jams and other delays, resulting in an imperfect deployment and so providing the opportunity for us to take advantage of their mistakes. We have then got to break out of this defensive mentality. Of course, the risks are high in a battle of manoeuvre, but so is the pay-off if successful, whereas a static concept, resulting as it does in a battle of attrition, can only end in ultimate if not early disaster.

Lecture to the Royal United Services Institute, London, 23 May 1984

0109**. Doctrine: the Framework of Understanding**. Doctrine establishes the framework of understanding and contributes to Fighting Power in several ways, as shown in Figure 1.2. To employ military force successfully, commanders should understand the nature of conflict; what kinds of operations armed forces may be required to conduct, and how those forces should be organized. The basis for military success consists of the ***approach to the conduct of operations***, the ***fundamentals of land force doctrine***, and the ***joint, multinational and inter-agency context*** within which they are set. ***Sustaining land forces*** preserves and regenerates the means of war.

The ***command of land forces*** determines the way armies are led, controlled, and decisions are made. ***Force preparation and generation*** is the process of building armies in general, and a land force for a given operation or campaign. These aspects are developed as chapters in this publication.

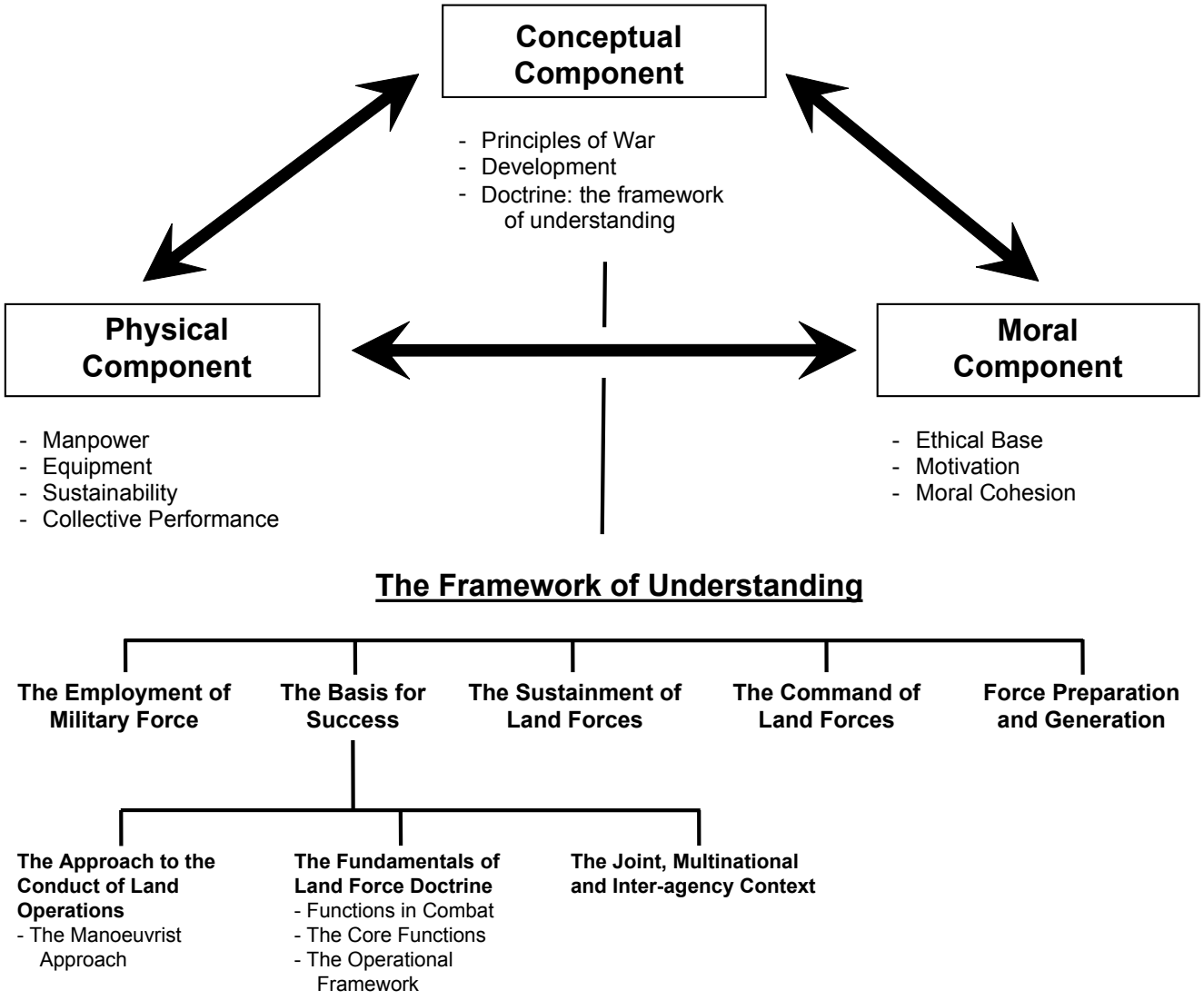

Figure 1.2 – Fighting Power

1.3 The Levels of Warfare

0110. This Section describes the strategic, operational and tactical levels of warfare. The growing complexity of the operational environment, including advances in global communications and weapons technology, makes it more difficult to define discrete levels of warfare. Tactical actions can have considerable consequences at the operational and strategic levels.

0111. **The Strategic Level**. Field Marshal Alanbrooke, Chief of the Imperial General Staff for most of the Second World War, described the art of strategy as:

> *"… to determine the aim, which is or should be inherently political; to derive from that aim a series of military objectives to be achieved: to assess these objectives as to the military requirements they create, and the pre-conditions which the achievement of each is likely*

to necessitate: to measure available and potential resources against the requirements and to chart from this process a coherent pattern of priorities and a rational course of action."[1]

Figure 1.3 – General Montgomery and Field Marshal Alanbrooke

Two aspects of strategy are particularly relevant to the armed forces:

a. **National Strategy**. A successful national strategy sets out a path using the diplomatic, economic and military instruments of national power to achieve the long-term aims of the nation and protect its vital interests. Successful strategies tend to be those which are integrated from the outset. They involve all relevant Government departments and agencies. Four broad strategic responsibilities flow from national strategy:

(1) To specify the strategic objectives for any intended military activities.

(2) To stipulate any limitations to be imposed on those activities, including the circumstances for military activity to end.

(3) To make the requisite resources available. This should include the direction of the national economic base when necessary.

(4) To explain the interaction of strategic military and non-military lines of operation, and describe how success in these lines of operation is integrated to achieve overall national objectives.

b. **The Military Component of Strategy**. The military component of strategy is the application of military resources to achieve national strategic objectives. It encompasses the art and science of the employment of armed force, and involves balancing resources between different military activities, such as major combat or counter-insurgency, to meet national objectives. During planning for operations, the military component of strategy de-

[1] David Fraser, *Alanbrooke* (London, Harper Collins, 1997) p187.

termines operational-level objectives, desired end-state, and military action required. It allocates military resources and defines constraints. It contributes to formulation of national strategy and provides the basis for military advice to the Government on the use of armed force.

0112. **The Operational Level**. Joint campaigns and operations are constructed and directed at the operational level in fulfilment of a strategic directive. At this level, abstract strategic objectives are translated into practical tactical actions, which is reflected in A A Svechin's enduring analogy:

> *"Tactics form the steps from which operational leaps are assembled; strategy points out the path."*[2]

At the operational level, military resources are directed to achieve the campaign objectives defined by the strategic authority. An operational commander designs, plans, sequences and sustains a campaign within his area of operations. He directs major operations within the campaign. Joint doctrine concentrates on the operational level, unifying single-Service tactical operations into a coherent campaign. The operational-level commander orders the activities of his forces in pursuit of his campaign plan, while the strategic authority allocates objectives and resources and sets limitations. The distinction between strategic and operational levels is rarely tidy in practice.

0113. **The Tactical Level**. Battles and engagements are planned and executed at the tactical level to achieve campaign objectives. At the tactical level, battles and engagements are fought to achieve tactical missions within the overall campaign design.[3] It is at the tactical level that troops are deployed directly for, and employed in, combat.

0114. **Levels of Warfare and Command**. The levels of warfare are not tied to the level of command. A corps, division, brigade, or battalion commander may operate at the operational or tactical level. At times, local actions that appear tactical may have significant operational or strategic impact, largely due to the influence of the media. The nature of command differs at each level of warfare and the level may change during a campaign. Therefore a commander should review regularly where the levels of warfare and his responsibilities lie.

0115. **Joint, Inter-agency and Multinational Operations**. Doctrine defines campaigns as joint activities; therefore campaign plans are joint plans. Furthermore, since strategic success can rarely be achieved by military means alone, military activities at all three levels will often support, or be supported by, other agencies. The line between the operational and tactical levels is often blurred, particularly when national contingents differ in size. The employment of a force from another nation may have political implications even if it is of only small tactical value. The significance of committing forces may vary between nations. Therefore a multinational force commander operating primarily at the tactical level may have an operational-level perspective.

1.4 The Contribution of Land Forces to the Joint Campaign

0116. Rarely will air, maritime or special forces alone achieve decisive results. Armies remain the principal instrument through which a nation or coalition imposes its will forcibly upon another. Land forces will frequently play an important and perhaps critical role in the joint campaign and will often form the supported component. This is due to the characteristics of land forces:

[2] A A Svechin: *Strategiya*, 1931.

[3] JDP 01, Paragraph 203.

a. **Only land forces can comprehensively defeat other land forces** upon whom an opposing regime is likely to rely for survival. Although air and maritime forces can do great damage to land forces, adaptive enemies can adopt techniques to survive their attacks and avoid overall defeat.

b. **Only land forces can seize terrain objectives**. Remotely delivered firepower, even on a massive scale, has rarely proved capable of ejecting determined troops from the terrain they occupy. Such terrain may be a strategic or operational objective in its own right, such as the Rumaila oilfields in Iraq seized by UK land forces in March 2003.

c. **Only land forces can secure terrain objectives**. Physical occupation by ground forces is the only certain way of achieving the lasting security of an area.

d. **Land forces have the greatest positive influence on civil populations**. Human interaction is the surest method of creating influence which is critical for longer term stability. Well-trained and educated soldiers, deployed amongst the population, can have a major impact on that population.

e. **Land forces enable other agencies to operate**. Long-term stability is likely to depend on other governmental and non-governmental agencies dealing with issues such as reconstruction, humanitarian disaster, and inter-communal tension. These agencies can only work in an environment in which land forces have achieved some measure of security.

f. **Land forces represent the strongest evidence of political commitment**. The committal of land forces is potentially costly, both financially and in human lives, and represents considerable political risk. A land component contribution is therefore likely to achieve the greatest influence within a coalition or alliance.

g. **Land forces contribute greatly to the deterrent effect of the joint force**. The deterrent effect of land forces results from the above characteristics which, when coupled with apparent willingness to use armed force, creates a credible ability to coerce that is much reduced without land forces.

0117. The composition and organization of land forces are described at Annex B.

1.5 The Nature of Land Combat

Enduring Characteristics

0118. When land forces fight they create a unique environment which is highly complex, dynamic and adversarial. Combat occurs between human organizations that are themselves complex. Its outcome is uncertain and hence unpredictable. Clausewitz described the uncertainty of conflict thus:

> *"War moves in an atmosphere composed of danger, physical effort, uncertainty and chance. Everything in war is simple, but even the simplest thing is difficult, and these difficulties, largely unforeseen or unpredictable, accumulate and produce a friction, a retarding brake on the absolute extension and discharge of violence. These difficulties consist of 'danger', 'bodily exertion', 'information' or the lack of it, and innumerable other small and incalculable circumstances and uncertainties originated by chance. These are some of the inevitable things that always prevent war in reality from ever approaching war on paper and in plans."*[4]

Land combat is *fundamentally* human. Human behaviour explains the nature of combat better than numbers or the interplay of technology although both can be critical. Furthermore, warfare tends to be evolutionary; armed forces learn from previous experience, and the loser tends to learn most.

0119. **Uncertainty and Chaos**. Intelligence can reduce uncertainty and operations can be designed to offset its effects. However, regardless of how much effort is allocated to intelligence, commanders still have to make decisions based on incomplete, inaccurate or contradictory information. This is the so-called 'fog of war'. Risk is reduced as information on the enemy is increased but is exacerbated by the *adverse* effects of chance. Opportunities are created by the *beneficial* effect of chance. Such opportunities should be exploited relentlessly in pursuit of the mission. Timely and effective decision-making, initiative and freedom of action are the keys to exploiting uncertainty. These principles underpin the British Army's approach to command, described in Chapter 6.

0120. **Violence and Danger**. The threat or use of violence is the means by which an enemy is compelled to do one's will. Violence results in bloodshed, destruction and human suffering. It brings shock, surprise, danger and fear. All men and women feel fear to some degree; courage is the strength to overcome it. Some find courage internally, although most need help from external sources. Those sources include a shared belief in a cause, the moral cohesion of the group and strong leadership.

0121. **Friction**. Friction resists all action. It can make the simple difficult and the difficult seemingly impossible. Friction may be mental, such as indecision over what to do next. Alternatively it may be physical, such as the effects of intense enemy fire, difficult terrain or bad weather. It may be induced by a poor plan, misunderstanding between allies, or a clash of personalities. Determination is a primary means of overcoming friction; experience is another. High morale, sound organization, effective command systems and well-practiced drills all help a force overcome friction.

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[4] Carl von Clausewitz, *On War*, translated by Col J J Graham and edited by Col F N Maude. (London: Routledge & Kegan Paul, 1962) Book 1, p. 53 and 77.

Figure 1 .4 - Human Stress Exhaustion

0122. **Human Stress**. Although technology has transformed combat, the presence of violence and its effect on man has not changed. Combat is at times horrific, and the effects of danger, fear, exhaustion, loneliness and privation affect the willpower of all combatants. Therefore the *determination* of commanders and soldiers to fulfil their mission despite circumstances is the bedrock of an army's fighting effectiveness. Often the origin of an enemy's defeat is the erosion of his soldiers' or commanders' willpower. Success on the battlefield frequently turns upon the relative resolve of opposing forces, both individually and collectively.

Complexity

0123. In comparison with naval and air combat, land weapons platforms are relatively simple. The complexity of land combat stems from the large number of soldiers and weapons platforms involved, and their interaction with the enemy, terrain and each other. Land combat is thus fundamentally different from naval and air combat, and the command and organization of land forces are critically different from those in other environments.

0124. The complexity of combat is not new. Considerable complexity emerged when individual soldiers were first allocated unique battlefield tasks, rather than all members of a battalion or company acting identically. In the British Army, this occurred on a large scale between 1916 and 1918, spurred by technical and tactical innovation. Such complexity is also a function of the combined arms and joint nature of land combat, involving the interaction and mutual support of different Arms and Services. The term 'complexity of modern war' refers generally to changes in the *operational environment*. They include political, legal and social developments, and particularly the consequences of developments in global communications. Many such changes appear to be continuing.

Unpredictability

0125. Some broad guidelines can be deduced from the unpredictable nature of land combat:

a. **Abide by Principles, not Prescription**. In land combat there should be no prescription, except for the most basic of drills and procedures. Therefore doctrine for land combat is framed as guidance and principles aimed at gaining understanding, rather than as direction and rules.

b. **Understand and Overcome Complexity**. Commanders should seek success in a complex and seemingly chaotic environment, in which causes do not lead to intended effects with any certainty. This factor affects both the nature of land command and the business of soldiering. Complexity can be reduced by adopting simple plans that concentrate on the essentials.

c. **Take Calculated Risks**. Since friction and risk are inherent in land combat, calculated risks should be taken. Risk can be reduced and should be managed. Although its consequences can sometimes be predicted and accommodated, it can never be entirely avoided.

d. **Act Pragmatically**. The unpredictability of combat suggests that some courses of action should work, but at times simply will not. Pragmatism, a function of experience and good sense, is required to achieve practical results in complex and unpredictable situations.

Symmetry and Asymmetry

0126. Land combat is rarely symmetrical. Adversaries normally differ in some regard, and sometimes significantly so. Asymmetry may reflect differences of intent, the composition of forces, culture, technology and size. Nations tend to develop means that benefit their own advantages and undermine their opponents'. Technological edge, guile and deception are to be expected and should be encouraged. The German airborne assault on the Belgian fort at Eben Emael in May 1940 is a prime example of asymmetric attack using novel means and methods, augmented by surprise.[5] Non-conventional, low-technology or CBRN responses to conventional forces are more recent examples, described colloquially as 'asymmetric warfare'.

0127. In recent history, Western armed forces have shown marked superiority over many opponents in conventional operations. It is to be expected that adversaries will choose not to fight on these terms, but will respond asymmetrically by avoiding conventional armies' strengths and attacking their weaknesses. Developments of terrorist tactics in Northern Ireland from the early 1970s and in Iraq since 2003 show how adversaries learn to exploit regular armies' vulnerabilities.

0128. The consideration of asymmetry should focus not so much on whether combat is asymmetrical, but rather on the *extent* and the *nature* of the asymmetry. The British Army should seek to conduct operations asymmetrically and not be surprised if its adversaries attempt to do the same. This has long been the experience of irregular warfare, sometimes described as 'small wars'.

Small Wars (1906)

Lines of communication are in fact a necessary consequence of elaborate and systematic organization, of modern armament, of the extensive requirements of the soldier of today, and of the conditions under which a regular army operates. The enemy, on the other hand, in most small wars works upon an altogether different system.

The adversaries with whom the regular troops in these campaigns have to cope, depend on no base and have no fixed system of supply. They are operating in their own country. Their food requirements are small—what they need they carry with them. Each man takes with him all the ammunition that he wants. The wounded in battle have to shift for themselves as best they can. The enemy lives in fact from hand to mouth, and it follows from this that he does not need communications as a channel for replenishing food or warlike stores, nor does he need lines of communications to retreat by if defeated…

So it comes about that the enemy is untrammelled by the shackles which so limit the regular army's liberty of action, a fact which is of great strategical importance; for while the organized forces are dependent upon communications which their antagonists may attack and even cut, they cannot retaliate. And as operations directed against an opponent's communications represent the most effective weapon in the armoury of strategy, the regular army is clearly at a disadvantage.

Colonel C E Callwell, *Small Wars: Their Principles and Practice* (3rd ed) (London: HMSO, 1906) pp. 86-87

[5] The assault on Eben Emael was one of the first ever airborne operations; the first instance in which a fortress was captured from the air; and the first use of shaped charges to attack fortifications.

1.6 The Continuum of Operations

0129. In general terms, armed forces operate through use or threat of collective violence. They do not always fight, but combat – the application of armed violence against a responsive enemy – is the most demanding task. Military forces must be prepared at all times for high-intensity conflict. However the ability to fight also creates organizations capable of performing a wide variety of other activities, including humanitarian assistance, peace support, deterrence and assisting in the rebuilding of failed states. This last role has gained importance in the current operational environment. The increasing use of armed forces for stability operations demands a re-examination of how we visualize the conduct of operations.

0130. Recent experiences in Iraq, Afghanistan, East Timor and elsewhere have shown that campaigns and subordinate operations often require military forces to operate effectively across the spectrum of conflict. They must conduct a wide range of military activities simultaneously, and transition quickly from one type of operation to another in rapidly changing operational environments. Commanders cannot focus on a single activity or sequential progression. Rather, they must be able to effectively visualize how a campaign or operation will likely evolve over time and in the light of changing circumstances throughout their area of operations. Campaign success is likely to depend on understanding such simultaneity, how it evolves throughout the campaign, and how it affects the planning and execution of operations. This concept is relevant to all levels of command.

0131. The continuum of operations provides a framework for understanding the complexity of the operational environment while planning, preparing for, executing an assessing all types of operations. It places a specific mission into a wider context that includes four major concepts: The **spectrum of conflict** provides an environment in which **predominant campaign themes** change over time, indicating priorities allocated to multiple **types of operations** that may be conducted **simultaneously**.

0132. The continuum of operations model enables missions to be visualized in a broader perspective that goes beyond clear-cut military objectives to an environment where the level of conflict is reduced. Commanders must maintain a long-range vision of where a campaign is going and consider the long-term effects of current operations. This framework should help commanders think beyond the specifically assigned mission to what may(most likely) come next.

Spectrum of Conflict

0133. The spectrum of conflict reflects the environment in which operations take place. The principal discriminator is the prevalence, scale and intensity of violence. These vary between absolute peace and absolute war.

Figure 1.5 – the Spectrum of Conflict

0134. No conflict will exist at just one point on this spectrum. Its intensity will vary in time and place. At any one time there may be a humanitarian crisis in one place, an insurgency in another, and intense fighting somewhere else. At any one place there may be house-to-house fighting one day, collection of forensic evidence the next day, and restoration of electricity and water supplies the day after. It is important to recognize that all such operations are likely to take place across the Spectrum of Conflict.

Predominant Campaign Themes

0135. States of peace, tension, conflict and combat may be local or widespread, and transient or prolonged. The character of any particular campaign may be difficult to define precisely and is likely to change over time. It will probably consist of a wide variety of activities across the spectrum of conflict, which also change over time. It is nevertheless possible to describe identifiable predominant themes at the campaign level within the Continuum. The character of the campaign varies according to the theme. For example, major combat is identifiably different from counter-insurgency. They demand different approaches and require different force packages. However, some tactical activities such as ambushes or reconnaissance are common to both.

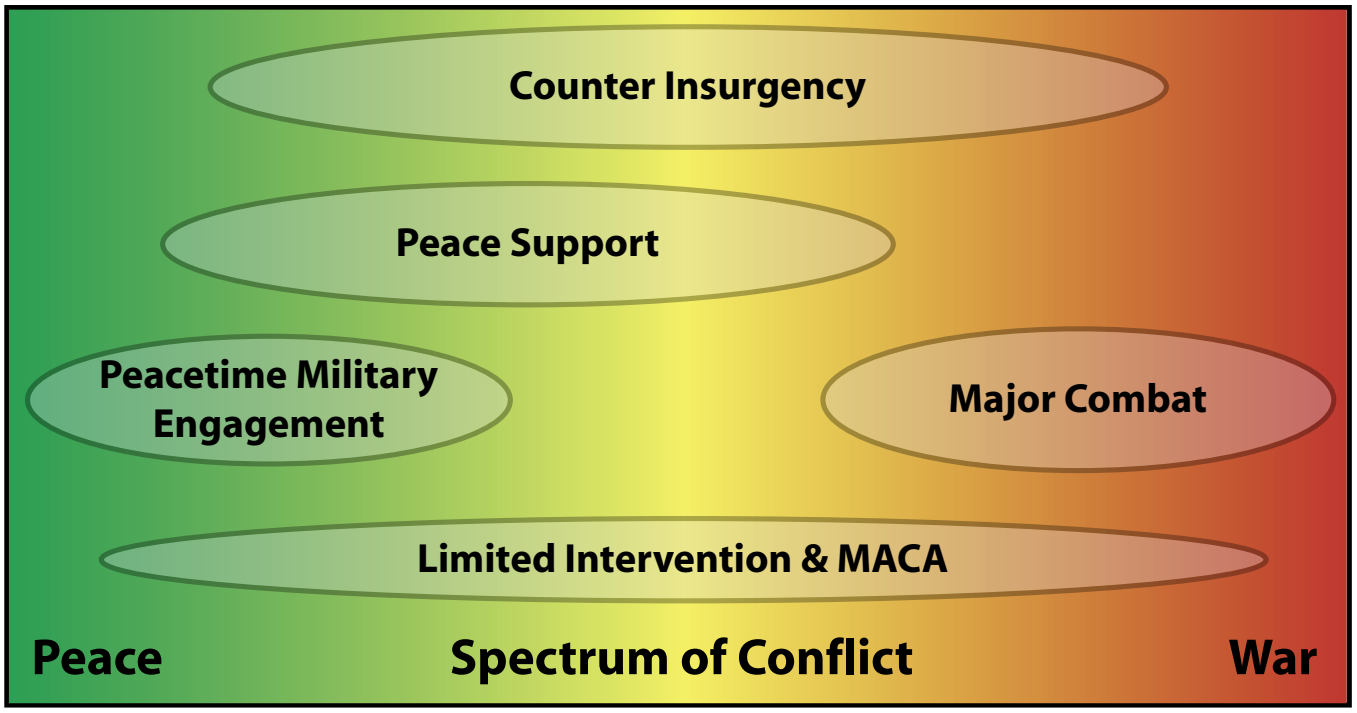

Figure 1.6 – Predominant Campaign Themes

0136. Campaign themes within the Continuum of Operations can be broadly divided into the following categories: ***major combat, counter-insurgency***, ***peace support***, ***limited intervention***, and ***peacetime military engagement***. For purely national operations, ***Military Aid to the Civil Authorities (MACA)*** is an additional category.[6] There are overlaps. For example, activities usually associated with major combat might be necessary within the peace support campaign theme.

0137. **Link with Spectrum of Conflict**. The predominant campaign themes may be arranged on the Spectrum of Conflict, as shown in Figure 1.6. Major combat tends to occur when the environment is characterized by extreme violence, while in PME the level of violence can be expected to be low. However, within major combat there may be large areas that are comparatively

[6] MACA includes operations to support resilience in the UK, and is described at Paragraphs 0168 and 0169.

peaceful. Conversely within peace support there may at times be highly violent incidents. Thus it is useful to describe operations as taking place across the Spectrum of Conflict, where the character of the conflict, and hence campaign theme, is only partly shaped by the varying degrees of violence within that spectrum. Limited intervention and MACA can occur anywhere in the Continuum. Each of the differing predominant campaign themes are described in Section 1.7.

0138. **Campaign Themes: Characterizations**. Descriptions of campaign themes are broad and tend to overlap. They will change over time for various reasons; such as, deliberate, preplanned phases and changes in the environment brought about by enemy or neutral activity, changed political guidance, or unexpected opportunities that arise during operations. It is possible to discriminate between them by characterizing the level of political risk, the effect sought, the character of combat and the type of enemy faced:

a. **Political Risk**. The level of risk acceptable to the Government, including the risk of casualties, is a measure of the political importance of the campaign. It is proportionate to the threat to the Nation or national interests. It is influenced by the public appetite to continue the operation, given the public's *perception* of the threat and the level of risk.

b. **Effect Sought**. The strategic effect sought will often determine the character of a campaign. For example, the defeat of a hostile state will demand a different approach from the separation of warring factions.

c. **Character of Combat**. Combat can be characterized by *prevalence, scale,* and *intensity*. Prevalence is a measure of its frequency. Scale describes the level of combat, which can be measured by the level at which forces integrate their activities in combat. For example, in major combat, battles are often fought at formation level; in COIN they will be more usual at section, platoon and company level. Intensity describes the degree of concentration of combat, measurable by the rate of consumption of logistics.

d. **Type of Enemies**. The nature and number of enemies, or potential enemies, will have a major influence on the character of the conflict. They range from sophisticated networked forces to primitive tribesmen. It is important to appreciate that enemies are adaptive. For example, once a regular army has been defeated it may mutate into an irregular force and change the character of the conflict. Alternatively, a successful insurgent group may evolve into a regular army.

0139. **Implications**. Campaign themes should not be confused with tactical operations, tasks or activities. Tactical tasks are the specific application of doctrine to solve particular tactical problems and are used to assign missions. Campaign themes are too general to use in assigning missions. Rather, they describe the broad general conditions that exist in an area of operations and provide principles to guide planning and action as a campaign progresses. Different approaches are therefore required for differing types of campaign theme. This results in potentially different principles to guide planning and action as a campaign progresses. Some tactical-level activities may have low-level principles to guide their execution, but low-level principles should not contradict the higher level principles that are appropriate for the particular campaign at the time. For example, an assault conducted during COIN may use the tactical principles of the attack but it should not contradict the broader principles of COIN.

0140. Although some campaign transitions may be easy to identify, such as the launch of a major attack, a campaign will often change its character gradually over time. An insurgent group may

grow increasingly effective over a period, or there may be a gradual lessening of violence. In such cases it will often be difficult to identify a single moment of campaign transition. Judgement will be required to determine the most suitable philosophical approach. Different approaches may be required in different parts of the same theatre. For example, forces may conduct predominantly offensive operations in some areas, while other forces prevent the growth of a nascent insurgency in areas which had been occupied earlier in the campaign.

Types of Tactical Operations

0141. Armed forces undertake a wide range of activities within a campaign. Although some may be consecutive, such as attack followed by defence, many occur simultaneously. For example, a force may be attacking in one area while defending in another, and conducting humanitarian assistance in a third. Even when activities are sequential, it is important to plan them simultaneously. If not, early actions may compromise subsequent operations. Examples include the destruction of bridges required later in an operation and offensive actions which in practice radicalize a civil population whose support is required later.

0142. The broad range of tactical activities is divided into ***offensive***, ***defensive***, and ***stability operations***. Together with ***enabling activities*** they describe all military activity undertaken within a campaign. Generally, all three types of operation may be conducted simultaneously, regardless of the campaign theme. For example, in peace support which consists mainly of stability operations there may be a requirement to attack a recalcitrant element or to defend a security base. The balance between types of operation gives a campaign its predominant character. Major combat may consist primarily of offensive or defensive operations, while COIN may have a complex mix of all three types. Enabling activities are never conducted in isolation - their purpose is to enable other operations.

0143. The combination of simultaneous offensive, defensive and stability operations that gives a campaign its predominant theme can be illustrated by the Continuum of Operations model, which also demonstrates how the combination can change over time. The model shows the level of effort committed to the types of tactical operations, above a bar that indicates how the

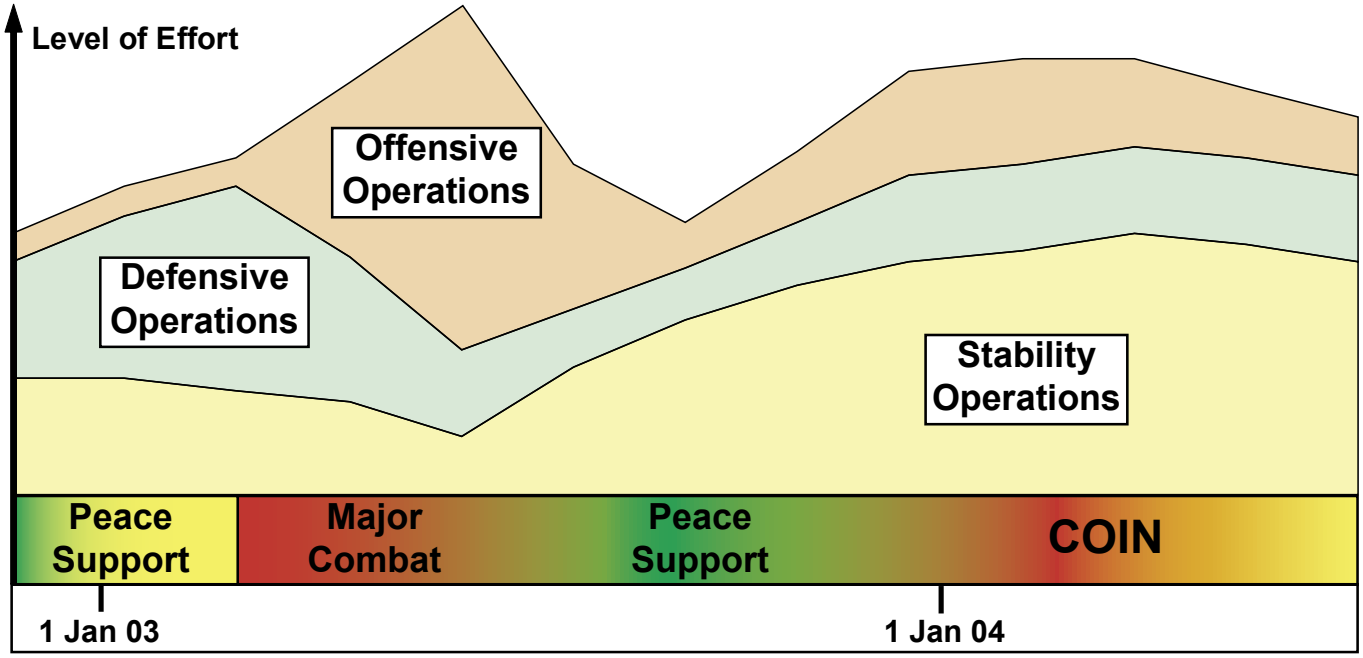

Figure 1.7 – The Continuum of Operations: Southern Iraq 2003 - 2004

predominant campaign theme evolves. An example of how the Continuum Model can be used to represent the evolution of a campaign is at Figure 1.7.

0144. In southern Iraq in 2003 and 2004 the continuum of operations varied widely. In early 2003, before the attack on Iraq, Coalition aircraft enforced the no-fly zone – peace support. On 19 March, the campaign theme changed to major combat as the Coalition initiated predominantly offensive operations which were declared complete by 1 May. The transition to peace support started when Coalition forces first occupied towns in southern Iraq and conducted stability operations. Initially the environment was relatively peaceful, with British and Coalition forces engaged in peace support activities. Later in 2003, a Shia insurgency developed; the level of violence rose and the campaign changed its character to COIN. This transition was difficult to identify accurately and occurred over several months.

Land Tactical Activities

0145. Types of tactical operation and their enabling activities are sub-divided into lower level activities such as the attack, exploitation and pursuit. Land tactical activities are listed in Figure 1.8. Each has particular characteristics. Some of the lower-level activities can be defined as tactical tasks because the effect they are intended to cause is implicit, but others are simply a particular kind of tactical activity. The types of land tactical activities are explained in more detail in Chapter 3.

Offensive Operations	Defensive Operations	Stability Operations
Attack	Defence	Peacekeeping
Raid	Delay	Peace Enforcement
Exploitation		Conflict Prevention
Pursuit		Peace Making
Feint		Humanitarian Assistance
Demonstration		Irregular Warfare
Reconnaissance in Force		Post-Conflict Reconstruction
Ambush		Peace Building
Breakout		Non-Combatant Evacuation

Enabling Activities		
Reconnaissance	Link-Up	Retirement
Security	Relief of Encircled Force	March
Advance to Contact	Relief of Troops in Combat	Obstacle Breaching/Crossing
Meeting Engagement	Withdrawal	

Figure 1.8 – Types of Land Tactical Activities

0146. A stability operation is defined as an operation that imposes security and control over an area while employing military capabilities to restore services and support civilian agencies. Stability operations involve both coercive and cooperative actions. They may occur before, during and after offensive and defensive operations, or as the primary objective of a campaign. Stability operations contribute to creating an environment in which the other instruments of power – diplomatic, informational and economic – can predominate, in cooperation with a lawful government.

1.7 Campaign Themes

Major Combat

0147. In major combat, operations take place in a state usually characterized as war, in which combat is frequent, widespread and intense. They are the most demanding military operations. When states or coalitions embark on major combat it is usually because they are directly threatened or there is significant threat to their interests. They are therefore normally prepared to take higher risks than in other kinds of operations. The goal of major combat may be far-reaching, such as toppling a hostile government. Alternatively it may be more limited, such as the recovery of territory or changing an enemy's behaviour.

0148. Major combat tends to be characterized by: a series of battles and major operations at high levels of command; and by high rates of combat activity and logistic consumption. Danger, fear and stress are normally at their greatest; the tempo of operations is normally high and often sustained; and they demand the highest levels of collective performance and training. Casualty rates tend to be at their highest although overall totals may be higher during protracted, sporadic violence.

0149. Major combat may be waged between the uniformed armed forces of nation states. Where they are not, they tend to blur with other campaign themes. For example, in Vietnam both sides deployed uniformed armed forces. However, although there were major battles, much of the war can be characterized as a COIN campaign. Similarly, during the Second World War, German forces conducted COIN operations against partisans across occupied Europe.

0150. Major combat normally seeks to defeat an enemy's armed forces and seize his terrain. Typical measures of effectiveness are therefore numbers of military units rendered ineffective or irrelevant, the level of enemy resolve, and terrain objectives seized or secured. Major combat is traditionally the type of campaign for which doctrine was originally developed, including the Principles of War. They are considered the norm while doctrinal principles for other operations are variations.

Figure 1.9 – Major Combat, Cheshire Regiment MG Team in Action, Monte Camino, Italy, 1943

Counter-Insurgency

0151. An insurgency is defined as an organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict. It is an armed political struggle, the goals of which may be diverse. Some insurgencies aim to seize power through revolution. Others attempt to break away from state control and establish an autonomous state within ethnic or religious boundaries. In some cases an insurgency has the more limited aim of achieving political concessions unattainable without violence. Generally, an insurgent group attempts to force political change by a mix of subversion, propaganda, political and military pressure. These aim to persuade or intimidate the broad mass of the people to support or accept the desired change. Campaigns of national resistance differ from insurgencies in that they aim to liberate a country from government by an invader, or overthrow a government imposed by an invader. The French Resistance of the Second World War is an example.

0152. Each insurgency is unique although there are similarities between them. Insurgencies are more likely to occur in states where there are inherent social divisions which lead to a lack of national cohesion. These may be based on racial, cultural, economic, religious or ideological differences. Insurgencies may thrive where states are economically weak and lack efficient, stable, or popular governments. Additional factors such as corruption and external agitation help to create a climate in which political violence erupts. Few insurgencies fit neatly into rigid classifications such as urban or rural, Leninist or Maoist. Effective insurgents adopt methods and tactics that suit their own particular needs. To be successful, an insurgency has to develop a unifying leadership and organization, together with a vision of the future which is acceptable to the general populace. Insurgents may terrorize local people into providing support. However, in general only an insurgency that is capable of attracting widespread popular support in the long term poses a real threat to state authority. Other characteristics of successful insurgencies tend to be: external support for logistic supply, training, and sanctuary; an ability to control some territory; and the eventual ability to form conventional units or cooperate with conventional units of allied organizations.[7]

0153. Insurgencies may be trans-national. Widespread communist insurgencies in the 1950s and 1960s and Al Qaeda's global campaign both aimed at the overthrow of western systems through simultaneous regional insurgencies. In such cases it may be difficult to determine to what extent the insurgency is directed centrally. This adds a further dimension to COIN. COIN should aim to defeat insurgency within a state, but may also need to break the links between insurgencies across a wide region.

0154. COIN is defined as: 'those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency'. The government facing an insurgency in its own territory is under direct threat and can be expected to bear a higher risk and accept proportionally higher casualties than an ally or coalition partner providing forces to assist the host nation. The effect sought is not primarily the death or capture of insurgents. It usually relates to controlling the level of violence, reducing popular support for the insurgency and cutting its external links. Typical measures of effectiveness are: numbers of violent incidents; the level of popular support for the government; numbers of surrendered enemy personnel; and levels of illegal border movement.

0155. COIN is characterized by relatively infrequent combat, compared with major combat. Combat is typically at section, platoon, and company rather than formation level. The rate of logistic consumption is also lower than in major combat although the campaign as a whole is

[7] Drawn from Max Boot, *Savage Wars of Peace* (New York: Basic Books, 2002).

likely to last longer. COIN campaigns typically continue for several years and so overall resource requirements may be higher.

0156. While principles and techniques from previous experience are valuable, the key to an appropriate response to an insurgency is rigorous and objective analysis, based on a broad perspective. Examining the complete range of characteristics enables a commander and his staff to build an accurate picture of the insurgent. They can then develop an appropriate campaign plan which involves all relevant civilian agencies. Such examination identifies the root cause or causes of the insurgency, and the extent of internal and external support to the insurgents. The basis on which the insurgent appeals to his target population, the depth of his commitment, his likely weapons and tactics, and the operational environment should also be considered. This approach helps the operational commander identify the insurgents' centre of gravity and design an effective campaign plan. It should also ensure that he interprets the appropriate cultural signals and acts accordingly. The principles of COIN are:[8]

Figure 1.10 – COIN, KOYLI Patrol, Crater, Aden, 1966

a. **Ensure political primacy and political aim**. The overall plan of campaign should be the responsibility of government. However, the military commander plays a key role in advising on the contribution of armed forces and their integration into the government's political, legislative and economic programmes.

b. **Build coordinated government machinery**. Unity of effort is a prerequisite for success, given the complexity and potential for friction of political/military structures. The ideal is to have one individual responsible for the overall direction of the campaign. Committee systems integrating civil, military and particularly intelligence efforts at all levels can be highly effective. The system initiated by Lieutenant General Briggs when appointed Director of Operations in Malaya in 1950 is a prime example.

c. **Develop intelligence and information**. Good intelligence is perhaps the greatest asset for a government combating an insurgency. Without it, security forces conduct unfocused or random operations, and may alienate local and international populations.

d. **Separate the insurgent from his support**. The insurgents should be denied information, logistics, recruits, safe bases and popular support. This can be achieved through physical separation and developing government control from a firm base through a series of expanding secured areas. A coordinated effort to win the psychological campaign for hearts and minds, linked to the need for the government to retain legitimacy, should be integral to this process.

e. **Neutralize the insurgent**. Neutralizing the insurgent and in particular the leadership forms part of a successful COIN strategy. Methods include killing, capturing, demoralising and deterring insurgents, and promoting desertions. This is an area in which military

[8] Further detail is contained in AFM Volume 1 Part 10, *Counter Insurgency Operations (Strategic and Operational Guidelines)*.

forces can specialize and should be a focus for COIN training. The aim should be to defeat the insurgent on his own ground using as much force as is necessary, but no more.

f. **Plan for the long term**. Governments should make long-term plans to improve the economic and social life of its population thereby reducing or eliminating the political causes of the insurgency. The announcement of such government initiatives can play a key role in winning the hearts and minds of the local population during a campaign.

Sir Robert Thompson

Sir Robert Thompson articulated five principles of counter insurgency in his book 'Defeating Communist Insurgency', based on personal observation in Malaya and Vietnam. They also reflected broad British experience of over 100 years of imperial policing. Although they were written in the context of the post-1945 communist threat, the principles can be applied to any insurgency. Thompson stressed that the most important aspect of COIN is achieving sound civil governance, as made clear by his description of the first principle:

The Government must have a clear political aim: to establish and maintain a free, independent and united country which is politically and economically stable and viable … It is essential to recognize that an insurgent movement is only one of the problems with which … governments are faced. The insurgency may demand priority, but it cannot be treated in isolation. For example, in most Asian territories there is an explosive population problem, with an annual growth rate of over 3 percent. The development of the country to meet this problem can be just as vital as the defeat of the insurgent movement. It would be futile to succeed in defeating the insurgency … if the end result is a country which is not politically and economically viable, and which might therefore fall to the communists at any moment … perhaps without a shot being fired.

An insurgent movement is a war for the people. It stands to reason that government measures must be directed to restoring government authority and law and order throughout the country, so that control over the population can be regained and its support won. This cannot be done unless a high priority is given to the administrative structure of the government itself, to its institutions and to the training of its personnel. Without a reasonably efficient government machine, no programmes or projects, in the context of counter-insurgency, will produce the desired results.

I have already stressed the great advantage which the communists derive from weaknesses in the government and seeds of conflict within the community – what they term the 'contradictions' … The correction of these weaknesses is as much a part of counter-insurgency as any military operation. In fact, it is far more important because unless the cracks in the government structure are mended, military operations and emergency measures, apart from being ineffectual, may themselves widen the cracks and be turned to the enemy's advantage.

Unless the long-term aim is constantly borne in mind, there will be a tendency to adopt short-term *ad hoc* measures merely as reactions to insurgent initiative or with the limited aim of attempting to defeat the insurgents militarily in the guerrilla phase. A good example in Vietnam was the proliferation of provinces; these were increased from thirty-seven in 1956 to forty-five in 1964. The new provinces were created solely for military and security reasons as sector commands, and completely lacked the administrative backing necessary for them to function as provinces. In circumstances in which there is a shortage of trained staff but in which modern means of communication are available, the fewer the centres of authority outside the capital, the easier it is for the central government ministries to control and supervise the execution of policy. In South Vietnam, thirty provinces would have been enough and twenty-five better.

Sir Robert Thompson, *Defeating Communist Insurgency,* E*xperiences from Malaya and Vietnam* (London: Chatto & Windus,1972) pp. 50-52

0157. Terrorism is a tactic. It is often used by insurgents to create terror through means such as sabotage or assassination. Terrorist attacks are frequently aimed at strategic effect without attempting to combat government armed forces. Terrorism is usually the only means of attack available to the insurgent at the beginning of an insurgency. A terrorist group can often be considered as a nascent insurgent group. Where social, economic and political conditions do not favour the would-be insurgent, the conflict stays in the terrorist phase, as was the case with the European urban terrorist movements of the 1970s. The terrorist's tactic is often to force a disproportionate response from the government thus alienating part of the population and building support for a wider insurgent offensive. Operations to combat terrorism should therefore be integral to the COIN strategy whilst ensuring that they do not contradict the principles of the COIN campaign.

Peace Support

0158. A peace support operation is defined as: 'an operation that impartially make use of diplomatic, civil and military means, normally in pursuit of United Nations Charter purposes and principles, to restore or maintain peace. Such operations may include conflict prevention, peacemaking, peace enforcement, peacekeeping, peace building and/or humanitarian operations'. The intent to uphold UN values and, where possible, act within a mandate is implicit. The UK frequently supports international responses to emergencies, ranging from humanitarian aid to the use of military force. Responses at the low end of the Spectrum of Conflict are usually coordinated by the UN or other international organizations. If a situation worsens and requires force, the response may be delegated to a military alliance or coalition. Development and relief agencies may have operated in the area for several years beforehand. They may also play an important role as a transition to a peace support campaign theme develops.

0159. Like most campaigns, a balance of military and non-military means is required for success. The role of land forces in peace support is typically to create a safe and secure environment, providing specialist support to enable civil agencies to address the underlying causes of the conflict and generate a self-sustaining peace. Peace support dominated campaigns are generally long-lasting so ***perseverance*** is required from both civil and military forces to achieve long term objectives. The creation, enhancement and sustainment of ***Campaign Authority***[9] is key to success. This comprises: the perceived legitimacy of the operation's mandate, including the powers of those prosecuting it; the degree to which the factions and local population submit to those powers; and the degree to which their expectations are met. In addition to remaining within the Law of Armed Conflict, the ***use of force*** should be balanced so as to enforce the mandate without detriment to Campaign Authority.

0160. Levels of political commitment to peace support tend to be lower than COIN and lower levels of risk tend to be sought. Most nations that send forces on operations to a peace support campaign usually do not expect them to be committed to intense and sustained combat. The effect sought is to uphold international peace and security by resolving conflicts through prevention, conciliation, deterrence, containment or stabilization. Typical measures of effectiveness are: numbers of treaty violations; the level of popular support for the Campaign Authority; and indications of reduction in inter-factional friction. Combat is usually rare in peacekeeping but may be intense in peace enforcement. When combat occurs, it is usually at a low level. Rates of logistic consumption are also generally low.

0161. Depending on the effect required of the operation and its character, the forces engaged on peace support can adopt one of three stances: enforcement, stabilization, or transition. These

[9] JWP 3-50 *The Military Contribution to Peace Support Operations*, 2nd Edition, p. 3-2.

are not necessarily distinct and movement from one stance to another may be difficult to identify at the time. ***Enforcement*** may be required to secure or implement a ceasefire or settlement and may use coercive force. ***Stabilization*** describes the period after an agreement or ceasefire. During stabilization land forces may be required to sustain a secure environment to enable other agencies to operate, and to develop the level of Campaign Authority. ***Transition*** is the period in which peace support operations seek to achieve the long term objectives, including the handover of responsibility for security to indigenous forces.

Figure 1.11 – Peace Support, 16/5L, UNFICYP Duties, Cyprus

0162. Peace support has a distinct political character. Approaches usually differ from major combat or COIN to some extent. The principles[10] for operations conducted within peace support are:

a. **Conduct Comprehensive and Complementary Campaigning**. An effective PSO should integrate the efforts of all military and non-military agencies. Since centralized command of the operation is unlikely, unity of effort should be achieved through collaboration and coordination. This requires the establishment of mutual trust between military and non-military agencies.

b. **Take Preventative Action**. To prevent worsening of a situation, military forces need intelligence of any intent to disrupt the operation. They also need the military ability to coerce or deter and the determination and mandate to take preventative action if required.

c. **Conduct Sensitized Action**. Military forces should understand the law, religion, customs and culture of the elements of the population with whom they deal. Such understanding is necessary to predict the psychological effect of physical action. It will determine the plans and responses of the peace support force. Intelligence, education, training and experience all contribute to the required sensitivity.

[10] JWP 3-50, pp. 3-5 to 3-11.

d. **Provide Security**. Protection of the peace support force and civilian agencies is an important requirement for land forces. A balance should be struck between robust force protection and the need to be open to the population.

e. **Ensure Transparency**. There should be no doubt in the minds of the factions or civil populations as to the aim and mandate of a PSO, nor of the penalties for transgressing the terms of an agreement. However, operational security is likely to remain important in many land operations, so complete transparency may not be achievable.

Limited Intervention

0163. Limited intervention has limited objectives such as the rescue of hostages or the security of non-combatants. They can be aggressive in nature, such as a strategic raid. They are normally intended to be of short duration and specific in objective and scope. They may be mandated by the UN Security Council or legitimized under international law, and mounted unilaterally or multinationally.

0164. By their nature, limited intervention operations do not generally warrant great political risk. They are frequently the response of a government wishing to limit risk. They may be planned to seek combat, or to avoid it. The key characteristic is that they are intended to take place over a limited period. They should be conducted according to the most appropriate principles, depending on the type of operation.

0165. **Non-Combatant Evacuation Operations**. National or coalition forces may be required either to conduct or participate in operations to evacuate specified nationals from a conflict area. Certain pre-conditions should ideally be present. They include the agreement of the local government to the evacuation; the provision of logistic facilities; the availability of suitable airfields or ports in the host or neighbouring country; and the availability of reliable intelligence. The deploying force should be prepared to provide security for the evacuees from their point of assembly in-country to their final departure from the area of conflict. Such operations are normally joint. They are planned, commanded and executed in the same way as other intervention operations.

Peacetime Military Engagement

0166. PME encompasses all military activities involving other nations that are intended to shape the security environment in peacetime. It includes programmes and exercises conducted on a bilateral or multinational basis and the provision of advisers and specialist training teams.

0167. Activities within PME are normally long-term and have the lowest levels of risk attached to them. They are aimed at encouraging local or regional stability. Typical measures of effectiveness include: progress of security sector reform; the level support for democracy; and the creation of a secure environment for economic growth. Combat is not envisaged, although there is always some possibility of terrorism against deployed forces.

Military Aid to the Civil Authorities

0168. Military support operations in the UK are described under the generic heading 'Military Aid to the Civil Authorities' (MACA). This type of operation is further subdivided into Military Aid to the Civil Community (MACC), Military Aid to Government Departments (MAGD) and Military Aid to the Civil Power (MACP). As shown below, these operations are quite distinct from one another since they have differing legal bases and political and military implications.

Type	Definition
MACC	The provision of unarmed military assistance to the country at large: **Category A – Emergency Assistance**: assistance to the civil authorities in time of emergency, such as natural disasters or major emergencies. **Category B – Routine Assistance**. Short-term routine assistance for special projects or events of significant social value to the civil community. **Category C – Attachment of Volunteer**s. Individual assistance by volunteers through full-time attachment to social service or similar organizations.
MAGD	Assistance provided by the Armed Forces to other Government Departments on urgent work of national importance or in maintaining supplies and services essential to life, health and safety of the community.
MACP	The provision of military assistance to the Civil Power in the maintenance of law, order and public safety using specialist capabilities or equipment, in situations beyond the capabilities of the Civil Power. Such assistance may be armed, if appropriate. For matters of public safety, support will routinely be to the Police as the lead organization; this includes specific security operations.

0169. **Resilience** is the term used to describe activities and structures that ensure the Government can continue to function and deliver essential public services in time of crisis, including terrorist attack.[11]

Annexes:

A. Joint, Multinational and Land Force Doctrine.
B. The Role and Composition of Land Forces.

[11] Joint doctrine is contained in JDP 02 *The Defence Contribution to the Resilience of the UK*.

ANNEX A TO CHAPTER 1

JOINT AND MULTINATIONAL LAND FORCE DOCTRINE

United Kingdom Joint Doctrine

01A01. United Kingdom doctrine at the highest level is described in Joint Warfare Publication (JWP) 0-01, *British Defence Doctrine* (BDD). In describing the British approach to military operations, BDD covers the essential elements of British doctrine and describes the core concept of fighting power. It contains most of the philosophical content required for land force doctrine and some of the principles. BDD is concerned mainly with the doctrinal component of military strategy.[1] It sits at the summit of United Kingdom doctrine publications and is the authoritative source from which all United Kingdom doctrine should be derived. BDD describes the nature and dimensions of conflict, the nature of security, and the components of defence. It discusses how the United Kingdom's Armed Forces contribute to national security and how military strategic direction is formulated and passed to operational commanders.

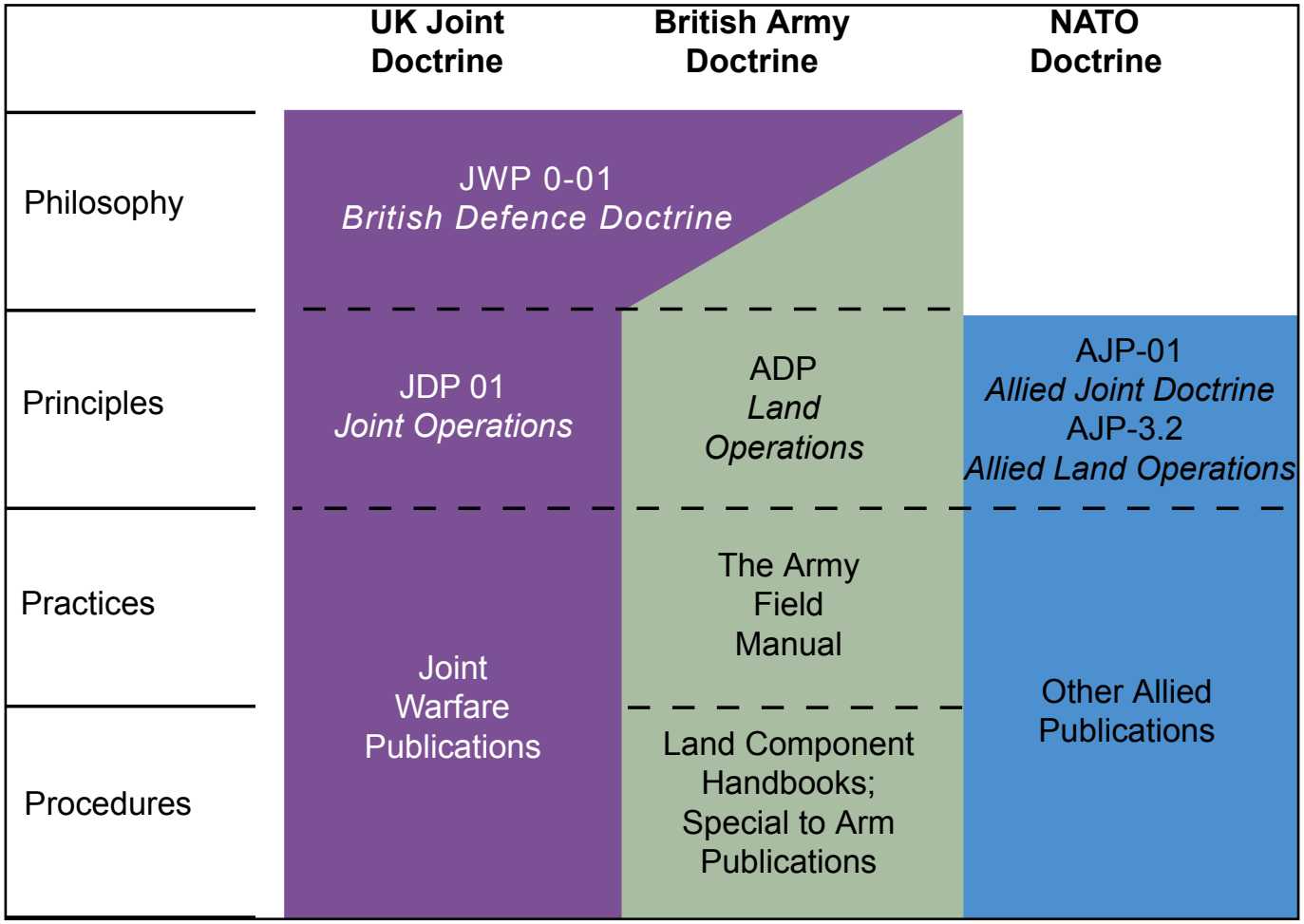

Figure 1A.1 – UK Joint, British Army and NATO Doctrine

[1] JWP 0-01, p. iii.

01A02. Joint Doctrine Publication (JDP) 01, *Joint Operations* provides an understanding of how to consider planning and conducting a campaign successfully.[2] JWP 3-00, *Joint Operations Execution* describes the integration, coordination and synchronization of deployed multinational and national Joint Operations.[3] JWP 5-00, *Joint Operations Planning* describes planning in deployed multinational and national joint operations. It is aimed primarily at planning staffs at the operational level.[4] United Kingdom joint doctrine is developed and disseminated by the Joint Doctrine and Concepts Centre, under the direction of the Director General of Joint Doctrine and Concepts.

NATO and ABCA Doctrine

01A03. The NATO standardization process encompasses development, ratification and subsequent promulgation of Standardization Agreements (STANAGs) and Allied Publications (APs). Alliance doctrine is developed by the member nations of NATO. It provides a common and agreed reference point for the standardization of operations, tactics, techniques and procedures. At the operational level, the principal NATO doctrinal publications are *Allied Joint Doctrine* (AJP-01) and *Allied Joint Operations* (AJP-3). The principal land doctrine publication is *Allied Land Operations* (AJP-3.2), which is the Alliance equivalent of this ADP. Once ratified by the United Kingdom, the content of allied publications is reflected in the United Kingdom's Joint and Single Service doctrinal publications. NATO doctrine is mandatory for NATO commands. Its use is not mandatory within national formations and units. However, the United Kingdom exercises lead nation status in the Allied Rapid Reaction Corps (ARRC), and a considerable proportion of the Field Army is assigned to it. A working knowledge of NATO doctrine is therefore required of national formation commanders and staffs.

01A04. The American, British, Canadian and Australian Armies Standardization Programme (ABCA) organization is an agreement between those four armies to achieve sufficient standardization to allow them to operate together in a coalition. It is not an alliance. The New Zealand Army and the United States Marine Corps have associate status and their doctrines closely reflect ABCA practice. The ABCA organisation exchanges information, establishes standardization agreements, and promotes exercises. These activities aim to develop interoperability and mutual understanding between participating nations. ABCA agreements are developed in a fashion similar to NATO doctrine. One of the most important ABCA publications is the *Coalition Operations Handbook*, which describes the activities required to form and operate a coalition force.

01A05. The United Kingdom is an active contributor to both NATO and ABCA doctrine. Its position as the only European English-speaking nation in NATO allows it to observe and reflect on both European and North American practice in the formulation of Alliance doctrine. The United States, Canada and Britain are members of both NATO and ABCA, and often carry NATO doctrine and concepts into ABCA and vice versa. Participating nations are at liberty to express reservations as to the content of NATO and ABCA doctrine, and on occasion do so. It is United Kingdom policy that national doctrine, both joint and single Service, should be consistent with NATO doctrine, including terminology and procedures, that the United Kingdom has ratified.[5] Land forces assigned to the ARRC will comply with NATO doctrine. In practice, although there are some differences between United Kingdom national, NATO and ABCA doctrine, they are usually not significant.

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[2] JDP 01, p. iii.
[3] JWP 3-00, p. iii.
[4] JWP 5-00, p. iii.
[5] DCI JS 16 (2002).

ANNEX B TO CHAPTER 1

THE ROLE AND COMPOSITION OF LAND FORCES

Roles

01B01. British Forces may have to undertake operations which fall into three broad categories: permanent tasks; contingent tasks; and tasks in circumstances which are unlikely to arise without a significant period of preparation. In present circumstances, general war falls into the final category. Specifically:

a. *Permanently committed forces* are dedicated on a day-to-day basis to the protection and security of the United Kingdom and Dependent Territories. They include strategic nuclear forces, forces for counter-terrorism, and overseas garrisons.

b. *National contingency forces* provide the core capability to meet a challenge to national interests and for operations in support of international peace and stability. Such forces should be properly trained and available for operations world-wide at short notice.

c. All forces, be they: permanently committed and contingency forces; units and individuals employed in the recruiting and training organization; or the reserves, including the Territorial Army, form the basis of a *residual capability* required to enable regeneration and reconstitution for general war. Most forces are also available for Military Aid to the Civil Authorities when required.

01B02. To meet these varied tasks, the Army requires forces capable of:

a. Conducting rapid intervention or *expeditionary operations*, possibly at great distances from their home bases for extended periods. These may involve: rapid deployment in response to, or in pre-emption of, a crisis; deterrence or coercion of potential belligerents from further escalation or confrontation; the conduct of high intensity combat to disrupt or defeat a determined enemy, typically in conjunction with allies; or participation in other activities in the Continuum of Operations aimed at stabilizing areas of conflict.

b. Contributing to the *defence and resilience of the United Kingdom*. This requirement includes maintaining a regional command and control infrastructure; providing a national strategic reserve of military units trained and equipped to conduct the whole range of military tasks, including MACA; and fielding units to carry out a range of specialist tasks.

01B03. The Army's ability to address these tasks requires a broad mix of military capabilities. Many such capabilities have a wide utility across the defence missions and military tasks. Chief among these is the ability to conduct major combat operations. This provides core capabilities which result in an army trained, equipped and mentally prepared to meet a wide range of challenges. It also provides deterrence against hostile conventional forces. The Army should also be able to adapt to provide the broad range of skills and capabilities required across the Continuum of Operations.

Land Force Elements and Types

01B04. A land force comprises several different *elements*, such as combat and combat support units. It may also contain troops of different *types* such as ground and air manoeuvre units. The land force should be selected and assembled so that it forms a cohesive and balanced whole that can operate effectively and efficiently.

01B05. **Force Elements**. A land force consists of combat, combat support, combat service support and command support elements. The proportion of each will vary between campaigns and operations.

a. **Combat**. Combat elements are those elements that engage the enemy directly: they fight, typically employing direct-fire weapons. They include armoured, infantry and some aviation units.

b. **Combat Support.** Combat Support is 'fire support and operational assistance provided to combat elements' Combat Support elements include: fire support, air defence, reconnaissance, combat engineer, some aviation and some electronic warfare elements.

c. **Combat Service Support**. Combat Service Support is 'the support provided to combat forces primarily in the fields of administration and logistics'. These force elements include logistic, medical and equipment support; personnel welfare; and administration. Force support engineers are also generally required. They provide water and electrical power supply, construct infrastructure and maintain supply routes.

d. **Command Support**. Command Support elements assist commanders in the exercise of command. They include staff of all types; communications, intelligence and information systems; and life support elements to protect, sustain and move the commander and his staff.

01B06. **Reconnaissance Forces**. Reconnaissance forces act as either combat or combat support elements. Their primary purpose is to gain information, usually on the enemy and the terrain. British reconnaissance elements do not generally fight for information, but some may be given fighting roles, typically as guard forces. A reconnaissance element that is primarily tasked with provision of battlefield information has a combat support role. One with a more aggressive task, such as guarding another force's flank, has a combat role. It should have appropriate fire, air and aviation support.

01B07. **Ground Manoeuvre Forces**. There are three types of ground manoeuvre forces: heavy, medium and light. They will usually operate in combination. For example, heavy and medium units can be grouped together within a single formation.

a. **Heavy Forces.** Heavy forces harness automotive power to deploy considerable firepower, protection and battlefield mobility; principally through the use of armoured fighting vehicles. They can apply concentrated firepower to achieve shock action; manoeuvre rapidly to exploit it; and therefore form a major component of many land forces. Their utility is restricted in some complex terrain, and their operational and strategic mobility is constrained by weight and logistic requirements.

b. **Medium Forces.** Medium forces are strategically and operationally more deployable than heavy forces, and may be among the first elements to deploy into a theatre. They are less capable than heavy forces, with reduced protection and firepower; but are more capable than light forces in many circumstances. They thus form an intermediate step between heavy and light forces.

c. **Light Forces.** Light forces have significant strategic mobility, since they can be transported by aircraft to any theatre. They may be the only forces that can operate in complex terrain. However, their firepower is limited compared to heavy or medium forces, and they are vulnerable without the protection of dispersion, concealment or fortification. Provision of greater mobility or firepower gives them the characteristics of medium forces, but may reduce their strategic mobility and utility.

Figure 1B.1 – Iraq War 2003, SCOTS DG, 1 QLR and 3 PARA

01B08. **Air Manoeuvre Forces.** Air Manoeuvre forces exploit the mobility of aircraft[1] to provide reach and agility. Air manoeuvre forces include attack, support and reconnaissance helicopters; air assault and airborne infantry; combat support and combat service support elements. Their operations should be closely integrated with close air support, air interdiction and other strike or reconnaissance aircraft.

01B09. **Combined Arms Groupings**. The concept of combined arms integrates the application of several arms such as infantry, armour, aviation, artillery and engineers. Combined arms groups should be used within an air manoeuvre, heavy, medium or light force wherever possible. Properly employed, combined arms groups provide a complementary range of capabilities that allow the overmatch of a less well-balanced force. They present few functional weaknesses for the enemy to exploit.

[1] *Aircraft* may be fixed wing *aeroplanes* or rotary wing *helicopters*.

Organization of Land Forces

01B10. **The Structure of an Army**. Armies are structured hierarchically into formations, units and subunits. A typical hierarchy is Army Group - Army - Corps - Division - Brigade - Unit - Subunit, although at present few nations possess discrete armies. Units of the British Army are called regiments or battalions depending on their Arm or Service. Their subunits are squadrons, batteries or companies.

a. **Formations**. A formation is a grouping of several units, together with dedicated command and command support elements. They normally consist of units of several arms and services, both in peacetime and on operations.

b. **Units**. A unit is the smallest grouping capable of independent operations over long periods. It contains integral command support and combat service support elements, and is normally commanded by a lieutenant colonel. They typically comprise between 400 and 1000 all ranks, the great majority of which are of one Arm or Service.

c. **Subunits**. A subunit is a subdivision of a unit. Subunits are normally commanded by majors, and typically comprise between 60 and 150 all ranks. They are normally subdivided further into troops or platoons.

01B11. **Structure for Operations**. Where possible, armies organize in peace as they do for war. However, in practice most adopt a modular approach which enables regrouping for specific operations, or phases within operations.

a. **Peacetime Structure**. Units and formations are organized against organization tables, which are used to scale the provision of manpower, equipment, barracks infrastructure, pay and similar issues.

b. **Order of Battle**. Although there is a master Order of Battle for the British Army, the normal meaning of the term is a list of those forces deployed for a campaign or major operation. Examples include the Order of Battle of 1st (UK) Armoured Division for Operation GRANBY in 1991, or that for Operation TELIC in 2003.

c. **Task Organization**. The regrouping of forces for specific operations and phases within operations is described by the task organization. It is typically within the task organisation that units are cross-attached to form all-arms battlegroups.

d. **Task Forces**. Within the UK the term ‘battlegroup’ has a specific meaning. A battlegroup is an all-arms grouping based on the headquarters of an armoured, armoured reconnaissance, infantry or aviation unit designed for combined arms operations. A more general term for a force created by cross-attaching elements from parent formations, units or subunits is ‘task force’.

CHAPTER 2

THE APPROACH TO THE CONDUCT OF LAND OPERATIONS

Chapter 2 describes the British approach to the conduct of land operations. It considers success and end-states, including the limitations on the application of armed force. It describes the philosophy of the effects-based approach, its relationship with the Manoeuvrist Approach and the requirements for simplicity and flexibility in operations.

OVERVIEW

2.1 Success and End States

0201. Armed forces fight to win: winning should therefore be definable and success should be measurable. This is achieved by defining an end-state, which is 'a state of affairs which needs to be achieved either to terminate or to resolve the conflict on favourable terms'.[1]

0202. There are degrees of success in conflict which should be weighed against both the physical and human cost of operations. The influence of the media, legal constraints, public opinion and economic factors all impinge on military decisions. This is particularly true in those operations which the United Kingdom chooses to conduct, as opposed to wars of national survival. A conflict may be resolved either when one side subjugates the other to its will, or when terms are found that are acceptable to all parties. Therefore the term 'victory' may not always be appropriate to describe the desired outcome of an operation.

0203. Success may have to be defined in other terms such as reconciliation, stabilization, or the acceptance of a peace plan. Where such acceptance is reluctant, or has to be imposed, protracted involvement is distinctly possible. A notion of graduated success has a direct bearing on the two ends to which military operations are commonly directed: the *tangible* effects on an enemy's physical means of fighting; and the often *intangible* effects on his understanding, will and cohesion. The physical destruction of elements of an adversary's capacity to fight is but one of a number of ways to defeat him. Defeat can be considered in terms of diminishing the effectiveness of a combatant to the extent that he is unable to prevent his adversary achieving his end-state. Thus defeat is not an absolute condition, but rather a matter of degree.

0204. Land combat is a fundamentally human endeavour and human beings decide, rationally or irrationally, when they are beaten. Historically, the defeat of an enemy force has almost never come at the point of one hundred percent loss to the loser. It normally occurs at some earlier point, which depends on the losers' will and cohesion. On an individual or small unit level, emotions such as fear, panic, shock and surprise are significant. These emotions adversely affect decision-making in commanders. When an enemy feels he is beaten, he withdraws his participa-

[1] JDP 01, Paragraph 3C5.

tion from the battle or engagement. However, the withdrawal of participation may not be total. A partial retreat or surrender may create a fleeting opportunity. If exploited, that opportunity may lead to defeat at a higher level and eventually bring about the successful conclusion of a campaign. The collective withdrawal of an enemy's participation in battle is primarily a mental rather than physical issue and may not be rational. Conversely, it may be an explicit and rational decision: the loser can see that unless he desists he will lose not only his objectives but his forces as well. Sometimes an enemy will stand and fight even if its destruction, defeat or capture appears inevitable. Local tactical failure may set the conditions for operational or strategic success elsewhere.

0205. Given the likelihood of determined resistance amongst potential adversaries, British land forces should be prepared for protracted and possibly costly close combat at the tactical level, which may be the only option available to achieve operational level success.

The Tet Offensive (1968)

The military events of Tet in January and February 1968 are individually on a small scale and, to the usual student of military history, hardly even interesting. They were essentially isolated but simultaneous guerrilla actions taking place in urban settings, and the two things most remarkable of them are, first, the degree of surprise achieved by the attackers, and second, the fierce determination that the latter showed in resisting to the death the counterattacks of their militarily superior opponents.

Figure 2.1 – US Marines Engage Viet Cong During the Tet Offensive

At Saigon the attack began at night with a sapper assault on the American Embassy, but this attack was contained by midmorning of the following day. The Viet Cong coordinated this attack with assaults on the Presidential Palace, the Vietnamese Joint General Staff compound, the Tan Son Nhut Airbase complex, and even the Phu Tho Race Track, which became their base of operations and held out longest. According to the Westmoreland Report, enemy forces consisted of 'elements of eleven local force battalions', which can hardly be considered a large number of men. Still, in order to deal with these attacks, General Westmoreland was obliged for the first time to put American combat forces into Saigon.

Why, then did [Tet] result in such a tremendous and finally decisive blow to the Allies, who not without some justification called themselves the victors? The answer lies partly in the shatteringly painful truth of a long build-up of illusion. It lies also in a story of how generals in Washington outsmarted themselves in trying to use the results of Tet as leverage to secure a larger mobilization of American forces. And behind all this was the growing weariness of the American people with a war of rather dubious relevance to themselves, which suddenly after three years appeared to be no closer to its end than it had been at the beginning.

Naturally, the shock was much greater in South Vietnam itself, where the Tet Offensive demonstrated in the most costly and effective manner that after all these years of war and 'pacification', and despite three years of combat involvement by the ultra powerful United States, no part of the country was safe, neither any rural area nor the heart of Saigon.

Bernard Brodie, 'Tet Offensive' in: (eds.) Noble Frankland and Christopher Dowling, *Decisive Battles of the 20th Century* (London: Sidgwick & Jackson, 1976) pp. 322-5.

2.2 Effects-Based Approach

0206. Effects are the consequences of actions. They are achieved through activity and are subject to the actions and reactions of an enemy or other parties, and the influence of the environment. Each action will give rise to intended and unintended effects and these may be immediate, short-term or long-term Tactical actions may have operational consequences that can, in turn, have strategic impact. In order to determine what must be achieved to conclude a campaign or major operation successfully, planning must consider the ***ends*** (desired outcomes), the ***ways*** (methods), and the ***means*** to achieve the desired effects at all levels.

0207. An effects-based approach is a way of thinking that encourages a broader and longer-term view of a situation. It focuses on outcomes rather than activity and advocates collaboration and synchronized actions from military and non-military sources. It requires a thorough understanding of the strategic environment in order to determine the appropriate ends, and the application of both violent and non-violent means to generate effects which will achieve the desired outcome. This offers a more holistic way of influencing the ***will***, ***understanding*** and ***capability*** of adversaries, allies and neutrals. This Comprehensive Approach[2] enables the integrated application of all instruments of national power. The goal is for the military to identify how it may best support, and be supported by, the other instruments of power.

0208. The underlying philosophy of an effects-based approach should be understood at all levels, especially the key tenets that effects are the consequences of actions; that effects have both intended and unintended consequences; that a wide range of target audiences need to be influenced; and that land operations are conducted within a wider political context.

0209. The effects-based approach and the Manoeuvrist Approach are complementary philosophies. The effects-based approach is more applicable at the operational and particularly the strategic levels, where consideration of non-military organizations and instruments becomes increasingly important. The Manoeuvrist Approach defines the philosophy for the planning and conduct of the military line of operation, particularly at the land tactical level.

2.3 The Manoeuvrist Approach

Fundamentals

0210. The Manoeuvrist Approach is one in which shattering the enemy's overall cohesion and will to fight, rather than his material, is paramount.[3] It is an **indirect** approach which emphasizes targeting the enemy's conceptual and moral component of his fighting power rather than the physical. The approach involves a combination of violent and non-violent means to achieve effects which **shape his understanding, undermine his will** and **shatter his cohesion**. It aims to apply strength against identified vulnerabilities. Significant features are momentum and tempo, which in combination lead to shock and surprise. It calls for an attitude of mind in which doing the unexpected, using initiative and seeking originality is combined with a relentless determination to succeed. It is applicable to all types of military operations across the spectrum of conflict. It:

a. emphasizes defeat and disruption of the enemy rather than, for example, taking ground for its own sake and depends on the precise application of force against identified

[2] For external reference, the Comprehensive Approach is being adopted to describe collaboration across government and with non-military organizations. It is considered in more detail in JWP 3-50, Paragraphs 119-120.
[3] BDD Edition 2, p 3-5.

points of weakness; and

b. aims to defeat the enemy's will and desire to continue by seizing the initiative and applying constant and unexpected pressure at times and places which the enemy least expects.

In combat, the Manoeuvrist Approach invariably includes elements of movement, firepower and positional defence. There will almost always be a requirement to fix the enemy, to deny him access to routes and objectives, and secure vital ground and key points. However, any such defensive measures should only be seen as part of the means to the end, which is the enemy's defeat. The forces employed in applying the Manoeuvrist Approach should normally be combined arms, and in practice will often be multinational.

Operation Iraqi Freedom (2003)

On paper it looked like an attack against a numerically superior enemy with a relatively small offensive force. Was I tempting fate by defying the war college maxim that an attacking force should have a 3-to-1 numerical advantage over an entrenched defender? "Not a bit of it", as my Brit friends would say. On the twenty-first-century battlefield, strength would derive from the mass of effective firepower, not simply the number of boots or tank tracks on the ground.

Figure 2.2 – US Forces Enter Karbala

Our ground forces, supported by overwhelming air power, would move so fast and deep into the Iraqi rear that time-and-distance factors would preclude the enemy's defensive manoeuvre. And this slow-reacting enemy would be fixed in place by the combined effect of artillery, air support, and attack helicopters.

Without question, our lines of communication would be long and exposed in places, stretching more than three hundred miles from the border of Kuwait to the outskirts of Baghdad. But the object was to destroy the Iraqi military's will to fight. A larger, slower, methodical, attrition-based attack model could defeat the enemy in detail, and our lines of communication could be better protected with such a force. But the time it would take to stage and launch such a juggernaut would leave Saddam too many strategic options: he could use the time to destroy Iraq's water or oil infrastructure, launch missiles against his neighbours, or use WMD against our troops—and his track record suggested he wouldn't think twice about any of those options

No, manoeuvre speed would be our most important asset. If high balling armour units could sustain that speed for days and nights on the end, they would own the initiative, and our momentum would overwhelm Iraq's ability to react—tactically and strategically. We would not apply overwhelming force. Rather, we would apply the overwhelming 'mass of effect' of a smaller force. Speed would represent a mass all of its own.

General Tommy Franks, *American Soldier* (New York: Regan Books, 2004) pp. 415-416

0211. Manoeuvrist thinking places a premium on understanding and manipulating human na-

ture, pitting strengths against weaknesses, adopting indirect and original courses of action, thereby minimizing losses. Such an approach offers the prospect of rapid results, or results disproportionately greater than the resources applied. It 'is attractive to a numerically inferior side or to a stronger side that wishes to minimize the resources committed.'[4]

0212. **Mission Command**. The Manoeuvrist Approach is best applied when it is underpinned by a philosophy of decentralized command that promotes freedom of action and initiative. Mission command also contributes to an effects-based approach as it stresses the importance of understanding what effect is to be achieved rather than determining the ways by which it would be achieved. At the tactical level, network-enabled capabilities enhance forward command. The principles of Mission Command are described in Chapter 6.

Cause and Effect in Land Operations

0213. Military commanders should consider potential courses of action in terms of the objectives they seek and the associated effects they wish to achieve. These effects might relate to the enemy, friendly forces, civilians, or the operational environment. A commander then describes the actions he wishes his subordinates to conduct in order to achieve the desired effects. Those actions are normally worded as tasks which, together with their purposes, constitute subordinates' missions. At the tactical level, such missions are typically concrete: they require some real battlefield activity such as the destruction of a discrete part of the enemy's force or the seizure of a specific piece of terrain. In ordering physical actions, commanders should also attempt to achieve psychological effects. In the longer run, the enemy is defeated when he considers himself beaten, which is as much a mental as a physical condition. At the same time, commanders should gauge the appropriate level of violence required and minimize undesirable collateral effects, especially when they may prejudice a successful operational or strategic outcome.

0214. Land combat is adversarial and dynamic, and dominated by human behaviour. It is therefore inherently unpredictable. Actions do not lead necessarily and predictably to all desired effects, not least because it is difficult to predict psychological responses to physical acts. Thus there is a limit to how far an approach to military operations based on the identification, resourcing and execution of intended effects should apply to land warfare. For an effects-based approach to succeed, it must be applied flexibly to allow local commanders to manipulate the inherently chaotic and unpredictable nature of combat. This includes predicting the probable response to their actions and the psychological impact of those actions on their opponents.

Understanding, Will and Cohesion

0215. **An Integrated Approach**. The Manoeuvrist Approach involves a combination of violent and non-violent means to achieve effects which shape the enemy's understanding, undermine his will and shatter his cohesion. Land combat is complex, dynamic and unpredictable. It is conducted by opposing and not necessarily symmetric forces that are themselves highly complex. An enemy force's understanding of the situation affects its will: if it thinks that it is being beaten, it tends to be demoralized. A tactical action which demoralizes a subordinate enemy commander reduces his effectiveness, thereby lowering cohesion of the enemy force overall. Similarly, an attack on the physical cohesion of the force, perhaps by destroying key elements, also demoralizes. Thus understanding, will and cohesion are intimately linked and an integrated approach to attacking all of them is required.

[4] BDD Edition 2, p 3-5.

0216. **Understanding**. Understanding has two major aspects. The first is an understanding the nature of conflict in general and the current conflict in particular. The second is an understanding of the current situation, including the environment, friendly forces, the enemy, and the enemy's perception of the situation. Shaping an enemy's understanding can involve any of these aspects. Social and cultural perspectives have an impact on understanding, since different societies view the same issues in different ways.

Unit Cohesion: France 1940

When the British Expeditionary Force deployed to France in 1939 it contained 5 Regular and 5 pre-war Territorial divisions. Another pre-war Territorial division, 51st Highland, was subsequently attached to the French Army. In the Spring of 1939 the TA had been doubled to produce 14 second-line divisions in addition to the original 14 pre-war divisions. By May 1940 two second-line TA divisions were in France, employed on line of communication duties. The 1st Armoured Division also arrived, just in time to meet the German attack near Arras.

There was a marked contrast between the various formations. The Regular 3rd Infantry Division, commanded by Major General Bernard Montgomery, was fully equipped and highly trained. Montgomery had insisted on high standards and regular training, both in units and formation headquarters. During the withdrawal to Dunkirk the Corps commander, Lieutenant General Alan Brooke, thought that Montgomery 'had as usual accomplished the impossible'; in practice the seemingly impossible was achieved through collective training and high standards of staffwork.

Conversely the second-line 12th and 23rd Infantry Divisions were poorly equipped and under strength. The 12th, for example, had no artillery and no divisional antitank, reconnaissance or machinegun battalions. Employed mostly as a labour force, they had little opportunity to train. It was swept up in the confused fighting around Lille and shattered. Remnants were evacuated through Dunkirk. Both 12th and 23rd Divisions were disbanded in July 1940, and never reformed. The price of sending ill-equipped and ill-trained formations to a theatre of war had been heavy.

Based on *The Battle for France and Flanders; Sixty Years On*. Brian Bond and Michael Taylor ed. (London: Leo Cooper, 2001)

0217. **Will**. Will can be regarded as the determination to persist in the face of adversity. It has two aspects: *intent* and *resolve*. Both can be attacked and so undermined. An enemy commander's intent is thwarted when he realizes that it is no longer relevant or achievable, and so desists from that course of action. His resolve is his strength of will. It is overcome when he is demoralized. Intent and resolve are not necessarily related.

0218. **Cohesion**. Cohesion has three related aspects: moral, conceptual and physical. **Moral cohesion** is an essentially human condition. Troops who have moral cohesion stick together: they continue to fight despite adversity and local reverse. It results from a combination of several factors, including high morale, good leadership, esprit de corps and belief in the cause at stake. Realistic training and combat experience contribute to it, as does a commander's personal determination and force of character. The application of common doctrine through training and education provides **conceptual cohesion**. It also encourages the development of a sense of perspective: the first reverse does not mean that the battle is lost. Field Marshal von Manstein observed that things are never as good or as bad as they first appear. **Physical cohesion** largely results from good tactics and balanced organizations. At the tactical level, it results from practical tactical measures such as establishing air and artillery support, mutual support between formations and units, and interlocking arcs within units and sub-units.

2.4 Attacking the Enemy's Understanding, Will and Cohesion

0219. When an army fights it should seek to attack the enemy's understanding, will and cohesion. This requires understanding the enemy, his system and his motivation so as to target attacks most effectively. A commander should wherever possible attack his enemy *systemically*. To the extent that they can be separated, the attacker should seek to *shape* the enemy force's understanding, *undermine* its will and *shatter* its cohesion. Doing so should leave it unable to respond effectively as the situation develops. One powerful way of achieving this is through inducing shock, of which the classic symptoms are numbness and irrational behaviour.

Surprise, Shock Action and Destruction

0220. A force can be said to be shocked if it displays any or all of the following conditions: reduced participation in combat; flight, panic or surrender of significant numbers; or inappropriate responses to the opponent's actions. These symptoms are known as shock effects. At a personal level, shock effect is physiological rather than psychological and requires the sudden application of violence to induce it. Shock effects are transient and may be local. They represent opportunities which should be exploited vigorously and may lead to success at higher levels. The tactical effects of shock may be perceived as local panic or **collapse**. If exploited, they may lead to more general collapse which may in turn lead to paralysis at the operational or strategic levels. The German breakthrough on the Meuse at Sedan in May 1940 is a prime example. The initial panic and collapse caused by the breakthrough of a single German infantry regiment, at the tip of a panzer corps at the main effort of the German Army, was vigorously exploited and ultimately led to the paralysis of the French high command and its government.

0221. There are, broadly, three main causes of shock effects: ***surprise***, ***shock action*** and ***destruction***. Although these can be described separately, they tend to overlap in the complex environment of the battlefield. The greatest shock effect results from a combination of all three causes. Surprise and shock action are closely correlated with tactical success, and success at the operational level if exploited vigorously. Although surprise, shock action and destruction *contribute* to shock effect, the actual effect achieved remains unpredictable and will vary with the enemy's cohesion. Furthermore, shock effect is transient and should always be exploited.

0222. **Surprise**. Surprise, a principle of war, is one of the most significant contributors to military success at all levels. It can have an effect quite out of proportion to force ratios. It is difficult to stress sufficiently the importance of achieving surprise. It was one of the main elements of the tactical and operational effectiveness of the German Army in the opening phases of the Second World War, and of the Red Army towards its close. The Allied landings in 1942-44 in North-West Africa, Sicily, mainland Italy and Normandy all achieved some degree of tactical and operational surprise. General MacArthur's bold amphibious landing at Inchon in September 1950 restored the initiative to United Nations forces in the Korean War. More recently, Coalition forces achieved significant operational and tactical surprise against Iraqi forces in two Gulf Wars.

0223. Surprise is a significant means of seizing the initiative at all levels of war and in all types of tactical activities. In offensive operations it can be generated in a number of ways, most notably through unexpected **timing, direction, means** or **methods** of attack. Unexpected *timing* is especially effective if it is early. Surprise through unexpectedly early arrival can occur at any point, not just at the start of a battle or engagement. Surprise though unexpected *direction* is particularly effective if the resulting attack is from the enemy's flanks or rear. This may be a consequence of

Deception: the Origins of Operation MINCEMEAT (1943)

By the time the Axis armies in Tunisia surrendered to the Anglo-American armies in May of 1943, it had already been decided at Casablanca that the next step toward Europe would be Sicily. And when, on June 11, 1943, the Allies captured the small island of Pantelleria, it might have seemed at OKW [*Oberkommando der Wehrmacht*] that the Allies' intentions were crystal clear. As Churchill said: "Anybody but a damned fool would *know* that it was Sicily." What could be done to mislead Hitler? There was, it was decided, only one thing to do: play upon his probable conviction that Sicily was *too* obvious a target and that the Allies were planning extensive landings on other parts of the southern littoral of Europe. To cloak "HUSKY," as the invasion of Sicily was cryptogrammed, Hitler must be led to believe that the Allies intended to invade two places: Greece in preparation for a thrust through the Balkans, and Sardinia as a jumping-off point for an invasion of southern France. Thus the LCS [London Collecting Section] began to plan a deception campaign to make it appear that Churchill's strategy in 1943 would be the same as it had been in 1915—the Allies were indeed raising a knife to slide through "the soft underbelly of Europe." When its plans matured, as they did in June 1943, the LCS had produced a ruse that was the equal of any of the great stratagems of history's great deceptions, and its main component was called 'MINCEMEAT'.

Anthony Cave-Brown, *Bodyguard of Lies*
(London: W. H. Allen, 1977) p. 279

the original plan of attack, or result from deep penetration and bypassing, which produce unprotected flanks and rears which can be exploited. Unexpected *methods* of attack typically result from novel tactics, whilst unexpected *means* of attack typically result from novel weapons. The Egyptian crossing of the Suez Canal in October 1973 demonstrated surprise in timing, method and means simultaneously. In defensive operations, surprise can be generated through unexpected tactical depth, the concealment and employment of reserves, or by the sudden withdrawal to defensive positions in the rear.

0224. The major factors in achieving surprise are deception, intelligence, security, speed and originality. Commanders at all levels should create and exploit every available opportunity to surprise an enemy. It need not be total, but merely sufficient to cause an enemy to delay a decision or act until it is too late. Surprise can be used to generate a high tempo of advance, which in turn contributes to further shock effect by enabling advancing forces to arrive unexpectedly early and from unexpected directions. However, surprise soon wears off, therefore its effect should be exploited rapidly.

0225. **Shock Action**. Shock action is the sudden, concentrated application of violence. Shock action numbs, deters and frightens. At a collective level, it is characterized by concentrations of indirect fire and a high tempo of advance employing closely-coordinated fire and manoeuvre. Key aspects are: the *concentration of violence*; its *sudden application*; and a *high rate of manoeuvre*. The mental perception of shock is reinforced by the rapid approach and impact of aircraft or heavy armour; by the employment of seemingly invulnerable weapon platforms; or particularly frightening weapons. Shock action can be particularly effective if it can be achieved at night or in close country.

0226. **Destruction**. Unsupported or unfocused destruction is not normally a major contributor to shock, other than when used massively it can become indistinguishable from shock action. The careful selection and destruction of discrete capabilities or force elements can amplify the shock effect of surprise and shock action. Considerable impact will be achieved when destruction is carefully coordinated with the effects of shock action and surprise.

Shock and Surprise in Practice (2003)

The armoured raid into Az Zubayr in Iraq, conducted by 2 RTR battlegroup during the morning of 26 March 2003, is a good example of achieving shock and surprise in practice. The objective was an enemy command and control centre (Objective BRAIN), which was to be attacked just before H-Hr with eight 1,000lb Joint Direct Attack Munition precision munitions. An armoured squadron would then assault the objective, supported by armoured infantry. The Commander's Diary contains the following report:

Figure 2.3 – Ba'ath Party HQ after Attack

The enemy was completely paralysed by the surprise attack, especially the JDAMs. What had previously been a concentrated area of enemy strength was neutralized by the shock and surprise of the bombing, followed up by tanks into the heart of the enemy's perceived stronghold. That there was no resistance during the conduct of the raid demonstrated the psychological effect as well as the physical blow this achieved against the enemy. The enemy did subsequently reorganize but only achieved limited resistance further in depth.

2 RTR BG 2100/16/OA dated 30 April 2003

0227. **Collapse**. Shock effects can at times be observed as collapse. Collapse may be either progressive or catastrophic. Progressive collapse occurs when the defending force surrenders or retreats gradually, a little at a time. Catastrophic collapse occurs when all or a large part of the defence gives way almost simultaneously. Although the two cases may not be clearly distinguished, catastrophic collapse is more effective. Panic is a major indicator of catastrophic collapse, and is infectious. Panic is transmitted as much by rumour as by fact. Bad news travels fast. The *perception* of failure is the best mechanism by which to promote *actual* failure.

Exploiting Success

0228. The effects of shock are likely to be local, temporary, and unpredictable. Localized shock effect should be expanded through exploitation to encourage collapse and paralysis at higher levels and over wider areas. Exploitation may be planned or opportunistic. *Planned* exploitation is designed beforehand to follow anticipated success, and may require fresh, echeloned forces. *Opportunistic* exploitation is a key mechanism for seizing and retaining the initiative, and building cumulative success at successively higher levels. Opportunistic exploitation should be carried out with all available forces to hand and initiated as soon as an opportunity is recognized, particularly at low tactical levels. Exploitation is a Core Function, and is described further in Chapter 3. At the campaign level, if the opportunity to exploit is lost, then the decisive edge won in battle may be blunted. Field Marshal Wavell observed that '[w]hile coolness in disaster is the supreme proof of a commander's courage, energy in pursuit is the surest test of his strength of will'. Commanders should guard against the natural tendency of troops to relax after achieving initial success.

The Second Battle of El Alamein (1942)

At the end of the second battle of El Alamein, Field Marshal Rommel's position was precarious. The full depth of his defence was about to be penetrated, and the British Desert Air Force had effective control of the air. To remain where he was would have invited total destruction in the open desert. Only a general withdrawal (eventually all the way to Tunisia) offered the prospect of saving his army. His greatest danger was for his line of retreat to be cut off and to be surrounded by the British forces in pursuit.

The fourth of November saw the end of the Battle of El Alamein. About midday the over-strained Axis defence snapped. Cohesion was lost and the containing line fell apart. Thoma [commander of the Afrika Korps] was captured fighting with his *Kampfstaffel* (battle escort) to check the X [British] Corps advance. At 5.30 p.m. Rommel realized the end had come and ordered a general withdrawal to Fuka to save the mobile elements of the Panzer Army. He was forced by circumstances to abandon most of his Italian infantry.

The immediate British pursuit was not a success. Field-Marshal Carver, who was present at the time, has described the first night:

> 'It would have been hard enough if all had been under the command of the same corps; with two differing corps, who were not on the best of terms anyway, both trying to carry out the same task in the same area, it was chaotic. There is no other word to describe the incredible confusion of that dark night in a sea of dust. Vehicles of every formation were travelling in every direction on every conceivable track, looming up in front of each other from unexpected directions out of the thick, stifling pall of dust.'

During 5 and 6 November indifferent British staff work caused by psychological exhaustion, shortage of fuel (due to difficulties in switching supply from large quantities of ammunition to equally large quantities of fuel), and the resolute action of the German rearguards, all conspired to delay the British advance.

Figure 2.4 – General Montgomery Watches German Forces Withdraw From El Alamein

Sir William Jackson, 'El Alamein' in: (eds.) Noble Frankland and Christopher Dowling, *Decisive Battles of the 20th Century* (London: Sidgwick & Jackson, 1976) pp. 205-206.

0229. In combat operations, the aggressive exploitation of success through reconnaissance is a major contributor to achieving shock and surprise. It has two main elements. The first is the identification of gaps, weaknesses and opportunities by manned reconnaissance, UAVs, and other sensors. Knowledge of the absence of the enemy is often as important as knowledge of his location. The second element is the timely application of manoeuvre and firepower to exploit opportunities. This does not mean fighting for information, but does require task-organizing forces to allow the creation and exploitation of opportunities. For example, it may need forward detachments or guard forces[5] based on combined arms groupings. These should include indirect fire controllers and an allocation of air, aviation or airmobile forces. Aviation forces can provide an effective method of exploiting success aggressively. Successful exploitation depends on rapid response. This is best achieved by decentralization, to reduce the time taken both for decision-making and translating decisions into action.

[5] Van-, rear and flank guards. See Paragraph 1B06.

0230. Exploitation does not necessarily involve combat. Frequently, the most effective exploitation of success, whether military or non-military, can be achieved through Information Operations. For example, the British Operation BARRAS on 10 September 2000 which destroyed the West Side Boys in the Occra Hills of Sierra Leone was exploited effectively through the media. In practice this halted combat operations by all rebel groups. The message was clear: “don’t mess with the British”.

2.5 Ways and Means of Attack

Ways of Attack

0231. Attacks on understanding, will and cohesion can be carried out by seizing and retaining the initiative, preemption, dislocation and disruption. These are typically conducted in combination.

0232. **Seizing, Retaining and Regaining the Initiative**. The initiative can be defined as ‘the ability to dictate the course of tactical events’. It may only be local; is usually gained through preemption; and is easily lost. In adversarial combat, if one side acts first and commits or threatens violence on the other, the latter usually reacts to protect itself. This constrains its ability to act offensively. Gaining the initiative is important to success and, once gained, should be retained as a matter of priority. Gaining the initiative requires a high tempo of operations to force an opponent continuously to react, making it difficult for him to initiate actions. Once it appears that the initiative is lost, or soon will be lost, a commander should plan to regain it. This can be done by withdrawing from combat so that an opponent cannot dictate events, enduring the enemy’s attack until he exhausts or overextends himself, or counterattacking. Counterattacking has several benefits. It halts the enemy’s momentum, since he is compelled to protect himself. It may cause surprise and shock, perhaps in the mind of the attacking commander. It may also present opportunities for exploitation.

0233. **Pre-emption**. To pre-empt the enemy is to seize an opportunity, which may be fleeting, before he acts in order to deny him an advantage. It wrests the initiative from the enemy and frustrates his plan. Its success lies in the speed with which the situation can then be exploited.

0234. **Dislocation**. To dislocate the enemy is to deny him the ability to bring his strengths to bear. Its purpose is wider than the frustration of the enemy’s plan. It seeks to render his strength irrelevant. It may be deliberate or a fortunate consequence of other actions. It seeks not to fight an enemy on his terms, by avoiding his strengths or fixing them so they are ineffective. Deep penetration and envelopment are two mechanisms of dislocation. The American drive across the Pacific in the Second World War isolated large Japanese forces on islands that were bypassed. This rendered them irrelevant, achieving dislocation through envelopment. Another means of dislocation is distraction, as explained by Liddell Hart.

0235. **Disruption**. Selective disruption can be used to break and confuse those assets that are critical to the employment and coherence of an enemy’s fighting power. It aims to rupture the integrity of an enemy’s force and render him incapable of deciding and acting purposefully. Major General Fuller likened this to having an enemy “shot through the brain”. The identification of those assets whose destruction is most likely to disrupt the enemy may not be easy. Military targets might include communication networks, command centres, transport nodes, or logistic facilities. Against irregular forces, command structures and supply routes may be the best targets to disrupt, although some may be inaccessible or difficult to attack.

Liddell Hart and Dislocation

It is usually necessary for the dislocating move to be preceded by a move, or moves, which can best be defined by the term 'distract' in its literal sense of 'to draw asunder'. The purpose of this 'distraction' is to *deprive the enemy of his freedom of action*, and it should operate in both the physical and psychological spheres. In the physical, it should cause a distension of his forces or their diversion to unprofitable ends, so that they are too widely distributed, and too committed elsewhere, to have the power of interfering with one's own decisively intended move. In the psychological sphere, the same effect is sought by playing upon the fears of, and by deceiving, the opposing command. 'Stonewall' Jackson aptly expressed this in his strategical motto—'Mystify, mislead, and surprise'. For to mystify and to mislead constitutes 'distraction', while surprise is the essential cause of 'dislocation'. It is through the 'distraction' of the commander's mind that the distraction of his forces follows. The loss of his freedom of action is the sequel to the loss of his freedom of conception.

B H Liddell Hart, *Strategy: The Indirect Approach* (London: Faber and Faber, 1967) pp. 341-342

Means of Attack

0236. The principal means of attacking an enemy's understanding, will and cohesion are the threat and the use force, separately or in combination. Force is applied by firepower and manoeuvre to achieve shock effect. High tempo and simultaneity are used to maximize shock effect and exploit it. This enables local cracks in cohesion to be turned into wider and more damaging fissures throughout the enemy force. Such fissures should be magnified by Information Operations. The aim is to overwhelm an enemy commander by simultaneous threats or actions conducted at such a tempo that he cannot react coherently. Command paralysis may result.

0237. **Manoeuvre**. Manoeuvre places forces into a position of advantage from where the enemy can be surprised, suppressed, shocked or assaulted. Alternatively it may lead him to believe he is defeated. There are several purposes to manoeuvre; they include:

a. To achieve a position from which fire can be delivered. This might entail sudden concentrations of fire intended to allow further movement in the face of the enemy.

b. To gain a position that permits surprise to be obtained; perhaps by assault from an unexpected or unguarded direction, or before the defender expects it.

c. To pre-empt an enemy manoeuvre by seizing and occupying terrain that is key to his plans.

Manoeuvre is a Function in Combat, and is considered further in Chapter 3.

0238. **Firepower**. Firepower destroys, neutralizes, suppresses and demoralizes. It can be delivered by sea, land and air platforms. It has physical, psychological and physiological effects. Firepower provides the violent, destructive force to amplify or enable the effects of tempo, simultaneity and surprise. Its effectiveness depends on its volume, accuracy, lethality and its suddenness or unpredictability. It allows destructive force to be applied precisely, effects from different systems to be concentrated against a single task, and the rapid switching of fire between targets. The psychological and physiological effects of firepower are transient, and should be exploited by manoeuvre before they wear off. Hence effective operations require close coordination between firepower and manoeuvre.

Mount Harriet (1982)

42 Commando Royal Marines assaulted Mount Harriet in the Falklands on the night of 11-12 June 1982 in a surprise attack from the enemy's rear. The 4th Argentine Infantry Regiment defending Harriet expected an attack from Mount Wall to the west; a diversionary attack by 12 Troop of 42 Commando reinforced that perception. The main body attacked from the south-east and approached to within about a hundred meters of the Argentine positions before it was detected. The assault was very rapid: leading elements reached the crest of Mount Harriet within about 40 minutes; the crestline was cleared within about two hours; and the fighting largely complete within 5 hours.

The Argentine regimental command post and mortar platoon were overrun early in the assault: a lucky consequence of the chosen axis of attack, but the effects of this selective destruction were significant. The Argentines lost much of their primary indirect fire support and command and control of their forces; both affected their cohesion. An Argentine company commander attempted to organize a counterattack force on the north side of the ridgeline; however a sudden, concentrated artillery fire mission broke up the attack. The survivors were seen fleeing east towards Stanley through the smoke and darkness. The surprise attack, shock action and some aspects of the destruction achieved had overcome the 4th Argentine Infantry Regiment's cohesion; it collapsed and was effectively destroyed as a fighting force

Figure 2.5 – Commando on Mount Harriet

The battle contrasts with the other five battalion battles in the Falklands Conflict - Goose Green, Mount Longdon, Wireless Ridge, Two Sisters and Tumbledown - which all took over 7 hours' fighting. 42 Commando suffered only 2 dead and 7 wounded; substantially less than Goose Green, Longdon and Tumbledown, and slightly less than Two Sisters and Wireless Ridge. 42 Commando captured over 300 prisoners, more than any other unit involved (except for 2nd Battalion, the Parachute Regiment, who captured 1007 Argentinians when the garrison of Darwin surrendered after Goose Green).

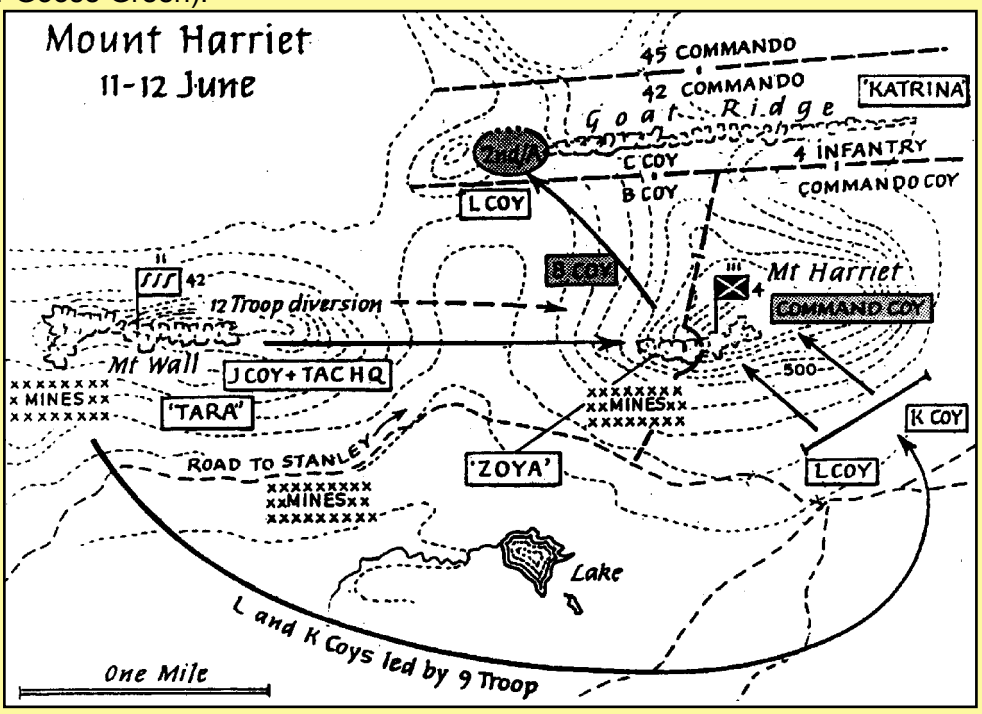

Figure 2.6 – Mount Harriet Plan of Operations

Drawn From Nicholas van der Bijl, *Nine Battles to Stanley* (Barnsley: Leo Cooper, 1999)

0239. **Tempo**. Tempo is defined as the rhythm or rate of activity of operations relative to the enemy. In combat, the side which consistently decides and acts faster gains and holds an advantage. Speed of execution also matters, and forces should be organized to achieve high tempo to the greatest extent possible. Shock and surprise enable the achievement of high tempo *in* combat, allowing battles and engagements to be won faster. A high tempo of operations *between* engagements creates further opportunities for surprise and shock. In manoeuvre operations, tempo can be achieved and maintained through the successful conduct of meeting battles and engagements, where both sides may be surprised, albeit temporarily. High tempo is required to support the exploitation of opportunities. Tempo does not require high physical speed in all cases, although battlefield manoeuvre should be *relatively faster* than the enemy's rate of recovery. The primary goal of high tempo should be to gain and then retain the initiative.

0240. **Simultaneity**. Simultaneity seeks to overload an enemy commander by attacking or threatening him in so many ways at once that he can not concentrate on any one, nor establish priorities between them. He cannot choose how and where to react, he is torn in different directions, and he finds it hard to respond coherently. By acting simultaneously against several levels of command, the effect on cohesion is cumulative. Risk may be accepted in seeking simultaneity by having only a small reserve. As with tempo, simultaneity should be seen through the eyes of an enemy, and its use judged by the effect on his cohesion and decision-making. Multiple penetration is a significant method of achieving simultaneity in offensive operations. Even a single breakthrough can have significant effect if it threatens a number of key enemy areas simultaneously. Simultaneity can be achieved in non-combat operations through a variety of methods, including the coordinated use of a mix of agencies such as in joint military-police operations.

0241. **Information Operations**. Information Operations can also be used to attack an enemy's Fighting Power, by manipulating the enemy's understanding and by using the *threat* of force to break his will and cohesion. Tactical Information Operations should be considered as a routine aspect of operations and integrated with all other tactical activities. If not, their effects will tend to be poorly coordinated with other military activity. Information Operations will have only an indirect effect on *physical* aspects of cohesion, since they work on the mind of the adversary. They can influence *moral* aspects of cohesion, typically through psychological operations. Related media and civil/military operations can assist this process. Operations PALLISER, BARRAS and SILKMAN conducted in 2000 in Sierra Leone all indicated the efficacy of Information Operations as a fundamental part of the application of the Manoeuvrist Approach.

2.6 Simplicity and Flexibility

0242. The complexity of conflict implies that military plans should be designed for *simplicity*, so that subordinates can act purposefully in confusing situations; and for *flexibility*, so that a plan can be adapted to meet changing conditions.

0243. **Simplicity**. Commanders should seek to adopt simple plans. These are often less vulnerable to friction than complex plans with many inter-locking elements, and are more easily remembered by tired subordinates in the heat of battle. There are two guides to planning for simplicity:

Figure 2.6 – Operations in Sierra Leone

a. As few actions as possible should depend on the completion of a prior action. The successful completion of a prior action conducted in contact with an enemy cannot be guaranteed, thus sequential operations may increase the risk of failure.

b. Ideally there should be multiple paths to success. Thus, wherever possible, the activity on the main effort should be one of several in parallel at that stage. In this way a simple switch of main effort will immediately open up a different path to success if the main effort is blocked.

Both aspects tend to suggest planning for simultaneous rather than sequential activities, where the tactical situation permits.

0244. **Flexibility**. Flexibility applies to both individuals and to a land force as a whole. Individual flexibility is largely mental, requiring an enquiring mind and the ability to consider alternatives. It is often a product of a broad education and is valuable both in commanders and staff officers. Physical flexibility is the ability of a force to move from one activity to another. It should be nurtured through grouping, training, good battle procedure and robust and well-practiced drills. It requires control systems that permit, for example, the swift massing and switching of indirect fire. It relies on fast and effective decision-making, and good staff work such as the production and distribution of road movement tables. Flexibility results from a commander's intellect and imagination, good staff and well-trained units.

0245. **Balancing Simplicity and Flexibility**. Increasing the number of planned options within an operation undermines simplicity. Commanders' and staff officers' focus is diluted, and each option is planned in less detail when time is short. Conversely a simple switch of main effort should not require much planning. Thus considerable judgement is required in deciding how many options should be planned in detail. The higher the level of a headquarters, the better it will be able to deal with multiple options simultaneously. At lower levels, with fewer planning staff, multiple options within a plan increase complexity and make it more difficult to act purposefully. Imposing such plans on subordinates may be counter-productive.

CHAPTER 3

THE FUNDAMENTALS OF LAND FORCE DOCTRINE

Chapter 3 describes the main aspects of British land force doctrine. It describes the functions in combat and the core functions, before considering the operational framework and describing the types of land tactical operations.

OVERVIEW

3.1 The Functions in Combat

0301. When analysing military activity it is useful to have a list of functions which provides a complete description of everything that military organizations do prior to, during, and after operations. The resulting list or framework is an analytical tool for commanders and staffs to use so as to ensure they address all aspects of operations. It provides a common vocabulary and frame of reference as well as a description of a force's overall capabilities which is independent of Service or Arm. Within Joint Doctrine, the Defence Capability Framework provides such a vocabulary of seven capabilities at the strategic and operational levels: **Command, Inform, Prepare, Project, Operate, Protect,** and **Sustain.**

0302. At the land tactical level, the six Functions in Combat describe tactical battlefield activities. They can be viewed as the land contribution to the 'Operate' capability, and they represent the practical expression of the physical component of Fighting Power. They are ***Command, Information and Intelligence, Firepower, Manoeuvre, Protection***, and ***Combat Service Support***.

0303. **Command**. Command is the exercise of military authority by a designated commander for the planning, direction, coordination and control of a military force. Control is a supporting means by which command is exercised and regulated, and is normally the province of the staff. Successful command requires positive leadership and teamwork, and the application of a common doctrine of command. Commanders and their staffs have to acquire and communicate information, assess the situation and determine the required actions in a timely manner. Thus sound intelligence, robust communications, and an efficient planning and decision-making organization are required. The subsequent direction and tasking of subordinates rests on the delegation of responsibility together with the allocation of the resources required to achieve their missions. Coordination and liaison ensure that unity of effort is maintained across a force. Command is addressed in detail in Chapter 6.

0304. **Information and Intelligence**. Accurate and timely intelligence is fundamental to the success of operations. Intelligence is the product of the organized efforts of commanders, staffs

and ISTAR collection assets to gather, analyse, and distribute information about the enemy and the operational environment. Information requirements are turned into intelligence through the ISTAR process and the use of ISTAR assets at each level of command. The commander sets out his information requirements which, supported by intelligence preparation of the battlefield and an intelligence estimate, are then refined into a collection plan. This plan provides the basis for acquiring information, either through the coordinated use of ISTAR assets held at that level of command or from those held at other levels of command. The information received is then collated, evaluated, analysed, integrated and interpreted. The process should be timely and responsive to support decision-making, and flexible enough to support the requirements of the whole force.

0305. **Firepower**. Firepower destroys, neutralizes and suppresses. It is essential in defeating an enemy's ability and will to fight and has utility in both decisive and shaping operations. In its broadest sense firepower includes conventional maritime, air- and land-delivered munitions, as well as offensive EW assets. The application of firepower should be judged by the effect required on the enemy, be it neutralization, suppression or destruction. This prompts consideration of the volume, duration and lethality of fire, and the precision and range of the munitions. The appropriate mix of weapons systems can then be chosen to achieve the desired effect. A combination of systems should be used to deliver firepower, thus complicating the enemy's response.

Figure 3.1 – Firepower, 3 RHA, Iraq War 2003

a. **Firepower in Isolation**. Firepower may be used in isolation from manoeuvre to cause attrition, to delay, or to disrupt the enemy. For firepower to be effective, strike assets should be linked to the appropriate sensors to provide both target acquisition and damage assessment. Modern command systems obviate the need for rigid groupings of firepower delivery systems.

b. **Firepower and Manoeuvre**. When firepower and manoeuvre work together, the manoeuvre commander should control the fire. This requires flexible command and control arrangements which allow the effects of firepower to be allocated between manoeuvre elements as appropriate. Firepower is likely to be a joint function, particularly in shaping operations. Although joint systems may provide some of the means, command should lie with the appropriate commander within the overall scheme of manoeuvre.

0306. **Manoeuvre**. Manoeuvre is the means of concentrating force or the threat of force at decisive points to achieve surprise, shock and opportunities for exploitation. It has both spatial and temporal dimensions which can be exploited to keep the enemy off balance: it thus also protects. The use of time and space to generate a higher tempo than the enemy poses him new problems which cause him to react, thus generating freedom of action. Manoeuvre enhances the potential effects of firepower, and firepower in turn enables manoeuvre. However, firepower can rarely substitute satisfactorily for manoeuvre. Manoeuvre used to secure a position of advantage has an enduring effect, which compels the enemy to respond by acting on terms that are not his own. Land manoeuvre embraces ground and air manoeuvre, and manoeuvre support.

Figure 3.2 – Manoeuvre, SCOTS DG, Iraq War 2003

a. **Ground Manoeuvre**. The positional advantages gained by ground manoeuvre forces are unique, and irreplaceable by other means. Seizing, holding and denying ground, blocking and penetrating enemy forces all contribute directly to success. The effects of ground manoeuvre can be sustained, and a long-term presence can be established in an area.

b. **Air Manoeuvre**. Air manoeuvre seeks to unite attack helicopters, ground and airborne forces, support helicopters and offensive support within a combined arms and joint approach to operations. An air manoeuvre force should be based on the integration of: attack helicopters; air assault and airborne infantry; combat support and combat service support elements; and the means to suppress enemy air defences. This optimizes the capacity for manoeuvre and tempo, leading to considerable flexibility and utility. Air manoeuvre is especially significant in the prosecution of operations to attack the enemy's depth. It does so by attacking long-range weapons systems, operationally significant enemy groupings, and command and ISTAR systems. Air manoeuvre can achieve operational-level surprise by using its reach and flexibility. An opponent may be unwilling to concentrate, employ or expose his key capabilities due to the threat of such an attack. Air manoeuvre can be employed in decisive, shaping or sustaining operations. Air manoeuvre operations are considered at Paragraphs 0363-5.

Figure 3.3 – Air Manoeuvre, Move Forward by Chinook, Iraq War 2003

c. **Manoeuvre Support**. Those activities, primarily military engineering, which contribute to shaping the battlespace to enable strategic, operational and tactical freedom of manoeuvre across the continuum of operations are described as manoeuvre support.

Figure 3.4 – Manoeuvre Support, 26 Armd Engr Sqn Combat Engineer Tractor, Iraq War 2003

0307. **Protection**. Protection preserves the fighting potential of a force so that it can be applied at a decisive time and place. It also reduces friendly casualties that may cause media and political pressure on the operation at the strategic level. Protection allows friendly forces to function despite the effects of enemy weapons and hostile environments. It can be achieved in part by fixing an enemy and, if necessary, by destroying him before he can attack effectively. The need for protection and the effort devoted to it may diminish as the operation progresses, as the initiative is wrested from the enemy and he becomes increasingly unable to respond appropriately. Whilst the need for protection will never disappear on operations, risks should be balanced in order to free as much combat power as possible for offensive action. Effort spent in protecting the force is necessary but does not contribute directly to striking the enemy. Protection functions include: air and missile defence; counter-mobility; NBC defence measures; defensive Information Operations; field fortifications; protective security; and the hardening of facilities and equipment. Intelligence, surveillance and reconnaissance assist protection through early warning. Deception, Operations Security and dispersion also contribute to protection. Counter-mobility limits the enemy's ability to manoeuvre and so enhances other aspects of protection. Counter-mobility tasks include obstacle creation, route denial and obscuration.

0308. **Combat Service Support**. Combat Service Support sustains the force from its home base to and within the theatre of operations. It influences the tempo, duration and intensity of all operations. It includes the sustenance and moral well-being of troops, the maintenance of materiel, the provision of expendable commodities and the replacement of casualties. It allows combat power to be maintained so that operations can be conducted successfully. It is therefore an integral part of the planning and execution of campaigns, battles and engagements. More detail is given in Chapter 5.

3.2 The Core Functions

Context

0309. At the operational level, four functions are derived from the Manoeuvrist Approach.[1] Together they form a conceptual framework for the visualization and conduct of operations:

a. To *shape* the operational environment.

b. To *attack* the adversary's cohesion.

c. To *protect* the cohesion of the force.

d. To *exploit* the situation by direct or indirect means, or a combination of both.

These functions are often used in the design and phasing of joint campaigns. At the tactical level, the focus is narrower. It concentrates on the achievement of tactical missions derived from the campaign plan. In combat operations, they typically require the defeat of enemy forces, and the seizure or defence of objectives.

0310. At its simplest, there are two core functions: to ***fix*** and to ***strike.*** The need to ***find*** and to be prepared to ***exploit*** is implicit in both. In the 5th Century BC, Sun Tsu coined the terms 'ordinary force' for the function of fixing the enemy or denying him the freedom to achieve his purpose; and the 'extraordinary force' for the function of manoeuvring into a position of decisive

[1] JDP 01, Paragraph 314.

advantage from which he can be struck. Whilst finding and fixing contribute to *shaping*, striking and exploiting have the potential to be *decisive.* Fixing is by no means confined to defensive operations to protect the force. Defensive or offensive operations designed to fix the enemy may set the conditions for offensive action to strike him. **Where circumstances permit, operations designed primarily to find, fix or strike the enemy should be exploited**. Operational experience indicates that finding, fixing, striking and exploiting should be conducted concurrently, or at least achieve seamless transition from one to another. The campaign plan for Operation DESERT STORM chose to do both.

Operation DESERT STORM (1991)

We will offset the imbalance of ground combat power by using our strength against his weakness. Initially execute deception operations to focus his attention on defense (sic) and cause incorrect organization of forces. We will initially attack into the Iraqi homeland using airpower to decapitate his leadership, command and control, and eliminate his ability to reinforce Iraqi forces in Kuwait and Southern Iraq. We will then gain undisputed air superiority over Kuwait so that we can subsequently and selectively attack Iraqi ground forces with air power in order to reduce his combat power and destroy reinforcing units. Finally, we will fix Iraqi forces in place by feints and limited objective attacks followed by armored (sic) force penetration and exploitation to seize key lines of communication nodes, which will put us in a position to interdict resupply and remaining reinforcements from Iraq and eliminate forces in Kuwait.

United States Secretary of Defense, *Conduct of the Persian Gulf War: Final Report to Congress* (Washington DC: United States Department of Defense, April 1992)

0311. The core functions have wide utility across the continuum of operations. In a COIN campaign non-military and paramilitary adversaries are **found** by information gathering by the intelligence services, covert and overt elements of armed forces, and other government agencies. The uniformed military forces and the police, combined with diplomatic efforts and Information Operations, **fix** the insurgents, acting as the 'ordinary force'. Locally-raised forces can also help to find and fix opponents, and have been employed in numerous campaigns to good effect. Special Forces, military and police units and the legal system contribute to **striking**, acting as the 'extraordinary force'. **Exploitation** in both combat and non-combat operations involves taking advantage of a developing situation in accordance with the superior commander's intent. For example, local tactical successes against insurgents may enable freedom of movement for military forces, civilian police, government officials and humanitarian workers. This process, if exploited, may assist in winning the 'hearts and minds' of the population and allow economic and political development to take place.

Finding the Enemy

0312. Finding the enemy is a basic function which endures throughout an operation. It includes locating, identifying, tracking and assessing the enemy. Forces may be directed specifically to fight the battle for information, particularly in the opening stages of an operation. This will normally be a sound investment when the situation is confused and seemingly chaotic. Whatever its source, information is never wholly reliable. It may need checking or corroborating with other sources. Too much information is a form of friction that can impede decision-making.

0313. To be successful, finding demands far more physical and intellectual effort than simply locating the enemy. A commander is far more likely to succeed if he who knows the organization and strength of an enemy force; what its intentions are; how it fights; and how it may react to friendly actions, than if he merely aware of the enemy's position. It is equally important to establish where the enemy is not located, and to determine what he is unlikely to do within a given

time, as this may provide opportunities for surprise and exploitation. Finding also involves the assessment of the physical, ethnic and political environment. This enables the commander to understand the context and rationale of the enemy's actions. Receiving information from a wide variety of sources contributes to the quality of the intelligence picture that helps a commander formulate his plan.

0314. A wide range of intelligence collection systems should be used to provide information about the enemy's strength, composition, disposition and location. Human analysis and experience is still required to assess likely intentions. In designing a 'find' system, three factors should be considered:

Figure 3.5 – Find: MAMBA Mobile Artillery Monitoring Battlefield Radar

a. **Collection**. A commander should be allocated sufficient ISTAR collection and analysis assets to support his mission, and be provided with information from assets held at other levels of command. A variety of sensors and systems should be used to provide a comprehensive view and be resistant to enemy action such as deception.

b. **Direction**. A commander cannot know everything. Modern ISTAR systems can produce so much information that they can overload a commander or analyst who tries to assimilate too much. These problems can be overcome by setting clear and succinct priorities for intelligence gathering, and directing ISTAR elements accordingly.

c. **Process**. Processing turns information into intelligence. It involves collation, evaluation, integration and interpretation. Collection and collation capabilities should be balanced. If not, information overload may result and critical information may be lost.

Fixing the Enemy

0315. **To fix is to deny the enemy his goals, to distract him and thus deprive him of his freedom of action.** By doing so, the friendly force gains freedom of action. Combat is adversarial and lethal; an enemy will avoid being struck and defeated unless his freedom of action is constrained. It is difficult to strike an enemy effectively if he is not fixed. Furthermore, an enemy who has no freedom of action cannot dictate the course of tactical events; he has lost the initiative. Depriving an enemy of his freedom of action has both physical and mental aspects. Physically, his force can be blocked, or pinned against an obstacle. Mentally, he is fixed if he believes he has no freedom of action, if he feels himself compelled to do something, or if he believes he should persist with something which in practice will not bring success. Deception or distraction can play a major role. Often the easiest way to fix an enemy is to attack something that he has to protect: his forces, for example. Deception may fix him until the deception is exposed, which may be too late for him to regain the initiative.

0316. **Denying the Enemy His Goals**. A force can gain freedom of action by preventing its enemy from achieving its goals and putting it in a reactive frame of mind. The aim is to throw the enemy off-balance. The principal means are to **surprise**, to **deceive** and to **lure**. When the enemy is surprised, he is uncertain how to act until it is too late. When he is deceived he may be certain how to act, but his decision will be wrong. The lure invites the enemy to take a course of action which makes him vulnerable. Inviting him to illuminate a target with radar which is then destroyed with anti-radiation missiles is an example.

Fixing the Japanese at Kohima (1944)

At the operational level, Field Marshal Slim's plan for the Battle of Imphal and Kohima sought to lure the Japanese into offensive operations which fragmented their cohesion. In Spring 1944, preparing for offence, Slim became aware that the Japanese Fifteenth Army was doing likewise. Slim had three courses: to continue offensive preparations, to stand and fight, or to retire to the Imphal Plain where his major logistics assets were dispersed. He chose the last course and in so doing, despite ceding hard won ground, lured the Japanese on to ground of his own choosing in the Imphal area. Here his Fourteenth Army could concentrate decisively to defeat them. Slim likened the concentration of administrative units around Imphal to a tethered goat, which could not fail to attract the Japanese, whose supplies were limited.

Figure 3.6 – British Mortar Detachments Support the Advance of 19th Indian Division, July 1944

Drawn From: Basil Collier, The War in the Far East 1941-45 (London: Heinemann, 1969) p. 415

0317. **Distracting the Enemy**. Freedom of action may be gained by distracting the enemy, thereby reducing his ability to interfere with operations. Uncertain of his opponent's objectives, a distracted enemy will tend to cover all options, thereby dissipating his force and being driven off his purpose. If he is not denied and distracted from his goals, he is able to continue with his plan, maintain reserves and cause damage. A measure of success is the proportion of combat power tied to protecting critical vulnerabilities. The tactic of the insurgent who apparently strikes at random is an example of how a relatively small force can tie up a much larger one by distracting it.

0318. **Depriving the Enemy of his Freedom of Action**. The enemy can also be fixed by a combination of methods which deny him **information**, deny him the **ability to pass orders**, and **inhibit their execution**. The enemy's information sources and his command system are central to his ability to concentrate force. Both often depend on the use of the electro-magnetic spectrum. Dominating and exploiting it can help fix the enemy. An unsophisticated enemy or one who decentralizes command will be less vulnerable. Distracting and fixing the enemy is further achieved by embroiling him in subsidiary actions which divert him from his main purpose. He should also be denied physical mobility.

0319. **Tactical Methods**. Fixing the enemy may require the use of firepower or close combat. Such operations can use a significant element of one's own combat power. Thus the extent to which the enemy's freedom of action should be constrained has to be judged carefully, to ensure that the resources devoted to fixing are no more than the minimum required. The air operations which preceded the Normandy invasion in June 1944 fixed the German mobile reserves by a combination of interdicting road and rail routes, direct air attacks, and other deception measures. These gave the impression of a direct threat in the Pas de Calais area. This example highlights the value of fixing the enemy by several different means, making it difficult to counter any one. In Northern Ireland, patrolling, vehicle checks, searches and observation have all contributed to fixing the terrorist by limiting his freedom of action.

Striking the Enemy

0320. To strike is to ***manoeuvre*** and then take ***direct action*** to achieve the purpose of the mission.

a. **Manoeuvre**. To manoeuvre is to gain a position of advantage in respect of the enemy from which force can be threatened or applied. Manoeuvre means more than movement in combination with fire. It allows combat power to be focused for greatest effect, avoid strengths and exploits weakness. The concept of water flowing over surfaces and gaps is useful to understand the concept. Water *runs off* surfaces – enemy strengths – and *pours through* gaps – enemy weaknesses. Existing gaps are exploited where possible. Failing that, they are created. There is usually a time aspect: to exploit fleeting opportunities requires agility, anticipation, and decentralized decision-making. This places a premium on reconnaissance, and on forward command which pulls combat power towards enemy weaknesses rather than pushing it from the rear. Doing so opens up options for striking the enemy which, if exploited, present him with multiple threats to which he is unable to respond coherently.

b. **Direct Action**. Direct action in combat means seizing objectives or destroying enemy forces. Firepower and movement are focused through simultaneity and tempo, to achieve shock and surprise and break the enemy's will and cohesion. Such coordination makes the most of the complementary characteristics of tactical capabilities, concentrating force at the selected point to ensure a favourable outcome. There is also a time dimension to striking the enemy. It is generally preferable to apply concentrated violence to win quickly at minimum cost. However, constraints may dictate a more protracted approach without the prospect of a single decisive act. In these circumstances, operations should be sequenced and sustained so that the effects on the enemy are cumulative. Nevertheless, whenever force is applied to strike it should be applied suddenly and in concentrations so as to achieve shock effect. Where the mission requires action other than the use of violent force, such as an arrest operation or preventing interference with the delivery of humanitarian assistance, similar

considerations of simultaneity and tempo apply. The aim should be to achieve shock effect, while avoiding the adverse effects of shocking the general population.

Exploitation

0321. As a core function, exploitation is the seizure of opportunity in order to achieve a higher commander's objective, or fulfil some part of his intent, directly. *Opportunistic* exploitation requires action beyond the given mission. It may therefore replace the task stated in orders[2]. For example, a commander ordered to neutralize an enemy force covering the approaches to his commander's objective may find an approach which is not covered and simply move directly to the objective. Opportunities can occur at any time whilst finding, fixing or striking. A commander should constantly search for such opportunities and, when they occur, pursue them ruthlessly. Exploitation should be expected from subordinates. They should not have to be told to exploit, and only told how far they may do so if absolutely necessary, using the term 'limit of exploitation'. General von Moltke the Elder's prescription for success at the operational level was "reconnaissance, victory and exploitation",[3] which might be described today as the aggressive handling of reconnaissance, tactical success and exploitation.

0322. Striking the enemy is intended to achieve the purpose of the mission. To turn this success into a greater one needs audacity and determination to seize fleeting opportunities to exploit its effect on the enemy. Admiral Nelson said to his captains before the Battle of the Nile in 1798 "first gain the victory and then make the best use of it you can". At the tactical level, exploitation has concrete, physical aspects. It usually requires the use of manoeuvre, fire, or both. Opportunistic exploitation allows unforeseen tactical advantages to be turned into operational success. It requires commanders with initiative, ruthlessness and a readiness to do the unexpected. One example was Operation COMPASS, Lieutenant General O'Connor's campaign against the Italians in North Africa in 1941. Unexpected success by the Western Desert Force in a spoiling attack at Sidi Barrani was exploited rapidly, and led to the destruction of the much larger Italian Tenth Army at Beda Fomm. Exploitation relies on offensive action, surprise and flexibility. In particular, it requires forces able to react rapidly to an unexpected opportunity. Liddell Hart referred to its importance as follows:

> *"For success in the attack, two major problems must be solved – dislocation and exploitation. One proceeds and one follows the actual blow. You cannot hit the enemy with effect unless you have first created the opportunity; you cannot be decisive unless you exploit the second opportunity that comes before he can recover."*[4]

0323. Aggressive exploitation is a key mechanism for translating local success into campaign victory. Once the enemy is found, force is applied to fix and then strike him, creating opportunities for higher levels of command. Reconnaissance forces, echelon forces, reserves or a combination of them then exploit rapidly. Reconnaissance should be extensive, expansive and continuous in order to find the opportunities for exploitation. Where reconnaissance forces are not strong enough to strike they fix the enemy, limiting his freedom of manoeuvre and permitting him to be struck by other elements. Aggressive exploitation can be conducted at any level at which seeking the enemy's positions, his strengths and weaknesses can be coupled fluidly to the ability to apply

[2] Planned and opportunistic exploitation are discussed at Paragraph 0228.

[3] Von Moltke's thinking was dominated by Naploeon's ruthless pursuit of the defeated Prussians after Jena, and the apparent inability of Prussian forces to follow up the victory at Waterloo as energetically as they themselves wished. General von Freytag-Lohringhoven, Foreword to Moltke's *Cannae*, quoted in T N Dupuy, *A Genius for War. The German Army and General Staff* (London; Macdonald and Janes, 1977), p.179

[4] B H Liddell Hart, *Thoughts on War* (London: Faber & Faber, 1944)..

sudden concentrated violence. This might even be the platoon or the section level.

3.3 The Operational Framework

0324. The Operational Framework provides a means of visualizing operations and aids coordination. It is most commonly used in the formulation and description of courses of action, and hence concepts of operations. The framework is used to describe how the missions of subordinates relate to each other by **time, space, function**, **purpose** and **geography**. It should primarily be viewed in terms of the **purpose** of the forces involved: what is considered will be **decisive**, and how other actions relate to that act by **shaping** conditions or **sustaining** the force. This is the *purposive* framework, which should be used for most operations. In some circumstances it may be simpler or clearer to describe operations primarily by their location in relation to the main force. This uses the *geographic* description of deep, close and rear operations. In straightforward operations, typically at lower tactical levels, operations may be described simply in terms of the Core Functions.

0325. Since the operational framework aids the commander in his description of missions to *his* subordinates, the particular framework used by one commander is not necessarily linked directly to that of another. An operation which is decisive in the execution of one commander's mission might, for example, be a shaping task within his commander's concept of operations. What is important is that each commander can visualize and clearly describe the actions he requires on the battlefield, in the way that he anticipates them unfolding in time, space and desired effect. That is the function of the Operational Framework.

Decisive, Shaping and Sustaining Operations

0326. The Operational Framework describes how the missions of subordinates interact in terms of their purposes. The commander selects one task which he considers will be decisive, and then describes the other tasks required to support it as either shaping or sustaining.

0327. **Decisive Operations**. A decisive act is one which, if successful, should lead inevitably to the achievement of the assigned mission. The decisive operation in a commander's plan is therefore the one which he selects as leading to success within his chosen concept of operations. There should only be one decisive operation in a plan. The choice of decisive act, and the actions required to support it, defines the plan uniquely. If a commander finds that he has more than one decisive act he should either reconsider which of the enemy weaknesses that he intends to attack is actually critical, or he should re-group the acts he considers decisive into one task. Outside major combat, opportunities for a single decisive act may be rare. Conversely, for example, the successful maintenance of a state of relative peace may be decisive in the resolution of the conflict as a whole.

0328. **Shaping Operations**. Shaping operations create or preserve the conditions for the success of the decisive operation. Those conditions relate to the enemy, the environment, and to own or friendly forces. Where they affect the enemy they act on his forces or his plans; hence Information Operations may play a key role in shaping operations. Achieving economy of effort is an important aspect of shaping operations, as it supports the concentration of force in time and space required for the decisive operation. Shaping operations may occur before, during or after the decisive operation. Security operations such as screen and guard force actions are shaping operations, whereas lower-level force protection activities such as NBC defence are sustaining operations. Shaping operations will often be aimed at the perceptions of the parties involved

and the population, or perhaps at facilitating a return to conditions of law and order. Information Operations should play a major role in this. In COIN or Peace Support, shaping operations may include the use of observation posts and patrols to gather low-level intelligence and restrict the movements of the adversary's men, equipment and weapons. Adversaries may attack non-military targets, such as civilian infrastructure or economic assets; shaping operations may include protecting these in order to secure political and public support. Such operations should normally be aimed at reassuring the general public and improving community relations. Military involvement may include covert action by special forces.

0329. **Sustaining Operations**. Sustaining Operations enable land forces to live, to move and to fight, in order to conduct decisive or shaping operations. They include CSS and force protection activities. Although sustaining operations should be closely integrated with decisive and shaping operations, they cannot by definition be decisive in themselves.

a. Sustaining operations include: reception into theatre; the assembly, movement and security of reserves or echelon forces; redeployment of forces out of contact; Host Nation Support; the establishment and protection of operating bases; establishment of lines of communication; and support for and protection of civilians and civilian installations.

b. Sustaining operations may be the target of enemy operations. A balance should be struck between active and passive force protection measures. Active measures seek out and neutralize or destroy enemy forces capable of attacking ones' own forces. Defensive measures include guarding, dispersal, camouflage and deception. Protection may enhance our freedom of action, but the effort and resources used should be appropriate to the risk, and related to the needs of decisive and shaping operations. The greatest risks occur where forces need to concentrate but lack appropriate protection. This vulnerability was exposed by the bombing of the US Marine Corps barracks in Beirut in 1982, which effectively ended the US operation.

c. Sustaining operations should be focused to support the commander's intent. Unity of command is essential to coordinate the many functions of sustaining operations. This may be complicated by the diversity of the units involved and their wide geographic dispersion.

d. Sustaining operations may attract a higher priority in COIN or Peace Support than in major combat, because of a greater sensitivity to casualties. In those situations, security forces are likely to become heavily committed to protective duties. While the aim will normally be to secure and hold the initiative, significant numbers of troops may be needed until and unless locally recruited forces and technological aids are available.

0330. **Integration**. Integrating an operation means more than simply initiating the decisive act. The conditions for its success should be preserved and sustained, since the decisive act will often not be the final act in a plan. Where it is not, shaping acts should be planned to translate its success into achieving the mission. This is the essence of planned exploitation. Shaping, decisive and sustaining operations should be conducted concurrently where possible. Not only will each influence the other, but the enemy is best defeated by fighting him simultaneously at many points, some of them in depth. However, shaping operations can take time to have effect. Shaping, decisive and sustaining operations require continuous and careful coordination and, where necessary, integration between levels of command. This is best done by ensuring that the purposes of those operations are explicit, interact, and combine to support the achievement of the mission.

Deep, Close and Rear Operations

0331. The way in which land operations relate to each other in time and space can be described geographically in terms of deep, close and rear operations. Geography is important in so far as it describes where the intended operations are to take place. Even in a non-linear battlespace, the concepts of deep, close and rear have a specific meaning. Deep simply implies lying far away from the main force, close means being near to it, and rear areas are those where lines of communications and logistic assets lie.

a. **Deep Operations**. Deep operations are usually conducted at long range and over a protracted timescale, against the enemy's forces or resources not currently engaged in the close battle. Deep operations include three principal activities: Information Operations; deep surveillance and target acquisition; and interdiction.

b. **Close Operations**. Close operations involve friendly forces in direct contact with the enemy. They are usually conducted at short range and in an immediate timescale. The means range from destruction to arrest. Close operations may include deception, manoeuvre, close combat, combat support and combat service support of the forces in contact. Activities involved with close operations require effective control to avoid fratricide.

c. **Rear Operations**. Rear operations are the largely administrative and logistic activities that take place in rear areas. They are intended to be conducted out of contact.

3.4 Types of Land Tactical Operations

General

0332. The description of land operations in Chapter 1 emphasized that military forces conduct a range of activities concurrently. While the balance between the different types of activity varies from one operation to another over time, there is likely to be a need to stabilize areas that have been secured even in large-scale high-intensity combat. Land tactical operations are classified as ***offensive***, ***defensive***, and ***stability.*** These may all take place in contact with the enemy and are likely to be conducted simultaneously by different elements within a force. A single force element may link them by a simple transition from one operation to another without breaking contact; for example from defence to offence. Alternatively it may be necessary to disengage or re-establish contact. A fourth group of activities are those that are never conducted in isolation; their purpose is to ***enable*** other operations. Thus they help to ensure the continuity of operations when the force is disengaging or seeking to re-establish contact, or out of contact. Land tactical operations are covered in more detail in AFM Volume 1, Part 1, *Formation Tactics*.

Offensive Operations

0333. The purpose of offensive operations is to defeat an enemy by imposing will through the threat and the use of violence. Subsidiary purposes are: pre-emption to gain the initiative; disruption of enemy offensive action; deception or diversion from the main effort; seizing ground; fixing the enemy as an economy of force operation; or gaining information by reconnaissance in force. Offensive operations have a role in all four Core Functions. The attacker seeks to create the conditions for freedom of movement and manoeuvre, shatter the enemy's cohesion and defeat his forces selectively, thus creating and sustaining momentum. The main characteristics of offensive operations are: surprise and shock; the seizure and retention of the initiative; agility, by which the

course of operations is changed to take advantage of fleeting opportunities; superior tempo, by which the intensity and sequence of operations is maintained to keep the enemy off balance; and continual operations throughout the depth of the area of operations.

0334. In offensive operations the real damage to the enemy's will is caused by surprise and shock. Inflicting physical damage is merely one means of doing so. The effects of firepower, tempo, simultaneity and surprise should be exploited by operating throughout the depth of the area of operations. Manoeuvre in the enemy's depth poses a major threat, to which the enemy will normally respond. Coordination is the key to successful offensive operations. A commander should coordinate the use of combat, combat support and combat service support forces, together with offensive air support and Information Operations, to prevent the enemy from organizing and maintaining a coherent defence. It will not always be possible to out-manoeuvre an enemy. Considerable force may have to be applied either directly or indirectly to eject the enemy if he cannot be by-passed. Commanders should seek to create surprise and shock to achieve a break-in to the enemy's defences, followed by aggressive exploitation.

0335. There are twelve offensive operations. Each is directed at a specific purpose:

a. **Attack**.

(1) **Deliberate Attack**. The purpose of the deliberate attack is to defeat the enemy, with an emphasis on massing combat power at the expense of time.

(2) **Hasty Attack**. The purpose of the hasty attack is to defeat the enemy, trading mass for time, in order to seize fleeting opportunities.

(3) **Counter-Attack** and **Spoiling Attack**. The purpose of a counter-attack is to defeat an enemy made vulnerable by his own offensive action. The spoiling attack is similarly directed at enemy offensive operations but with the limited aim of disruption.

b. **Raid**. The purpose of a raid is to destroy or capture a vital enemy asset. Its wider purposes may include disrupting an enemy and undermining his morale. Alternatively it may be intended to raise the morale of one's own forces.

c. **Exploitation**. As a tactical task, exploitation is characterized by a rapid advance against lessening resistance. The purpose is both physical and psychological. Physically, the aim is to retain the initiative by preventing the enemy from reorganizing his defence or conducting an orderly withdrawal. The psychological effect of an exploitation is to create confusion and apprehension throughout the enemy command, reducing his capability to react and lowering his morale. This may be decisive in itself.

d. **Pursuit**. The purpose of a pursuit is to catch or cut off a hostile force attempting to escape, with the aim of destroying it. It may develop from a successful exploitation. It may commence when the enemy force is demoralized and its units are beginning to disintegrate under pressure. Alternatively, it may originate in an operation in which the enemy loses his ability to operate effectively and attempts to disengage.

e. **Feint and Demonstration**. The purpose of a feint is to distract the action of an enemy force by seeking combat with it. By contrast, the purpose of a demonstration is

to distract an enemy's attention without seeking contact. Both may contribute to fixing an enemy.

f. **Reconnaissance in Force**. The purpose of reconnaissance in force is to induce an enemy to disclose the location, size, strength, disposition or possibly the intention of his force by making him respond to offensive action.

g. **Ambush**. The purpose of an ambush is to inflict damage on the enemy while denying him an opportunity to counter-attack, principally through surprise.

h. **Breakout of Encircled Forces**. In a breakout operation, an encircled force takes offensive action to link up with a main force. The breakout should attempt to surprise the enemy, and is more likely to be successful if it is conducted at the earliest opportunity.

Defensive Operations

0336. **Approach**. The purpose of defensive operations is to defeat or deter a threat. They are generally intended to provide the right conditions for offensive action. Defensive operations alone generally do not achieve a decisive conclusion to a campaign, which often requires offensive operations. However, defensive battles have on occasions been decisive to the conduct of a campaign.

0337. **A Concept for the Defence**. Defensive operations may be necessary at some stages in a campaign. A commander may choose to defend in order to generate or maintain opportunities for the offence. For example, by holding key terrain or fixing the enemy in one area, he may be able to establish the conditions for offensive action in another. The object is to force the enemy into action that narrows his options, reduces his fighting power and fixes him for counter-attack. The major challenge of the defence is to seize the initiative, which the attacker holds initially through his ability to dictate where and when to attack. While maintaining the integrity and cohesion of his force, the defender seeks to hold the enemy, to deceive him and encourage him to make a plan that is inappropriate. He seeks to lure him into situations where he can create and exploit surprise, denying him information, both actively and passively. He denies him the ability to pass orders by attacking his command systems. He thereby fixes the enemy for subsequent defeat by counter-attack.

0338. **The Conduct of Defence**. During defensive operations a commander should aim to seize the initiative from the attacker. The enemy's progress should be reduced, presenting the opportunity for offensive action to defeat him. An effective defence is therefore rarely passive, and should normally be based on the counter-attack. Historical analysis suggests that a mobile defence based on counter-attacks is generally more effective in most types of terrain than one based on positional defence. Defensive operations should not, therefore, be regarded as merely reactive. They should aim to create the right conditions for offensive action. These conditions may differ at the operational and tactical levels:

a. At the operational level, opportunities for more general counter offensives may be limited early in a defensive phase of an operation, but the campaign plan should include setting the conditions necessary for the enemy's culmination. When an enemy is forced to culminate in his offensive operation, the defender should switch to the counter-offensive. The opportunity for a successful counter-offensive may be short before the enemy recovers and resumes his offensive.

b. At the tactical level, the defender resists and contains the enemy only when necessary, seeking every opportunity to act offensively. Local counter-attacks should take place to break the momentum of an attack as soon as opportunities present themselves. If defending forces are deployed on wide fronts, a greater proportion of the force should be dedicated as reserves for counter-attack, blocking or reinforcement tasks. Attempting to be strong everywhere is to invite defeat in detail.

0339. **Characteristics of the Defence**. During the early stages of a defensive operation, the defender will usually have the advantage of fighting from positions of his own choosing. Preparation includes positioning forces in depth, using and improving ground, conducting reconnaissance and security operations, developing plans for counter-attacks, and initiating deception measures. These should conceal dispositions and intentions and misdirect the enemy's efforts.

a. **Disruption**. Defence gives the defender the opportunity to disrupt the enemy's attack. Disruption can be achieved by: defeating or blinding his reconnaissance; attacking his cohesion and slowing his tempo, by fixed defences and aggressive counter-attacks; and destroying critical assets through deep attack.

b. **Concentration**. Defence allows the defender to concentrate fighting power in order to defend himself and, in turn, defeat the enemy. At the lowest levels, concentration includes siting weapons and creating fireplans to mass fire effects on the attacker. Concentration cannot be achieved by being strong everywhere. Trading ground for time, or economy of force elsewhere, may be necessary to obtain an advantage at a decisive point. The defender uses deception, concealment, counterbattery fire, screening forces and air defence in order to minimize the risks of vulnerability through concentration of force.

c. **Flexibility**. The defender will strive to avoid or counter the enemy's attacks, while preparing to seize the initiative and so turn defensive operations to his advantage. This requires an ability to develop new plans rapidly, a willingness to shift the main effort, and a readiness to move swiftly to the offensive without loss of tempo.

0340. **Types of Defensive Action**. The two principal types of defensive operation are:

a. **Defence**. The purpose of defence may be to defeat an enemy force or to hold ground. Generally, both will require a fixed element that denies the enemy freedom of manoeuvre, and a moving element to counter-attack the enemy. The balance between these two forces depends upon the mission and the relative capabilities of the attacker and defender.

b. **Delay**. Delaying operations are those in which a force being pressed by an enemy trades time for space, reducing its opponent's momentum and inflicting damage without itself becoming decisively committed. Delay may be conducted to slow an enemy's advance, reduce his fighting power, gather information about enemy intentions, or protect friendly deployments. Delaying operations also allow the commander to shape the battlefield, and to create the conditions for a counter-attack.

Stability Operations

0341. There is a range of stability operations that are identified by their individual purpose. The significance of stability operations is sometimes underestimated, because of the low level at

which forces engage in them. A deliberate attack or an advance to contact may be conducted at any level. Conversely procedures such as control of movement, search, and crowd dispersal are drills which are *conducted* at low level but *employed* at high levels as part of stability operations. Some of those low-level drills and procedures are also common to the other types of tactical operations. An understanding of the different types of stability operations provides guidance as to how the relevant low-level drills should be coordinated, and which are likely to be appropriate.

0342. **Peacekeeping**. Peacekeeping operations are generally undertaken to monitor and facilitate the implementation of a peace agreement in a situation where consent is substantially in place. A loss of consent and a non-compliant party may limit the freedom of action of the peacekeeping force and even threaten the continuation of the mission. Thus the requirement to remain impartial, to limit the use of force to self-defence, and to maintain and promote consent, should guide the conduct of peacekeeping.

0343. **Peace Enforcement**. The purpose of peace enforcement operations is to enforce the provisions of a mandate designed to maintain or restore peace and order, to allow the operations of a separately mandated peacekeeping force. Peace enforcement operations normally take place under the principles of Chapter VII of the UN Charter. They are coercive in nature and are conducted when the consent of all parties to the conflict has not been achieved or might be uncertain. The conduct of a peace enforcement operation will normally require robust methods and tactics.

0344. **Conflict Prevention.** Conflict prevention operations are used to deter and coerce parties to a potential conflict. Conflict prevention activities may range from diplomatic initiatives, through efforts designed to reform a country's security sector, to preventative deployments of forces in support of diplomatic initiatives. Those activities are typically intended to prevent or contain disputes from escalating to armed conflict.

0345. **Peacemaking**. Peacemaking describes the activities conducted after the commencement of a conflict aimed at establishing a cease-fire or a rapid peaceful settlement. While peacemaking is accomplished primarily by diplomatic means, military support to peacemaking is possible either indirectly, such as staff support or planning, or in the form of the direct involvement of military forces.

0346. **Humanitarian Assistance.** Humanitarian assistance aims to alleviate human suffering where the responsible authorities in an area are unable, or unwilling, fully to support the population. It may be conducted in the broader context of Peace Support, or as an independent task which may precede or accompany the humanitarian activities of specialized civilian organizations. Operations may require the direct provision of military assistance, or the provision of support to civilian organizations.

0347. **Irregular Warfare**. Irregular *warfare* denotes a form of conflict where one or more protagonists adopts irregular methods. Irregular *troops* are any combatants not formally enlisted in the armed forces of a nation-state or other legally-constituted entity. Stability operations in this category include actions to counter irregular troops or forces employing irregular methods, counter terrorism, and assistance to friendly irregular forces.

0348. **Post-Conflict Reconstruction**. The immediate aftermath of conflict will usually be characterized by the absence of effective government, and the potential for a loss of control that can be exploited by criminals and remaining hostile elements. The transition to civilian control by a legitimate government should be supported by a wider diplomatic, humanitarian and economic strategy. Military assistance should be but one element of that strategy. Military force has an important role in the early stages when security is uncertain or other reasons delay the arrival of civilian organizations. Action to maintain essential services and law and order will be required to prevent the situation deteriorating. Military assistance should be withdrawn when an adequate level of security can be maintained and security tasks handed over to civilians.

0349. **Peace Building**. Although superficially similar to post-conflict reconstruction, peace building implies a longer-term effort. It has particular relevance when the local infrastructure has been severely damaged, or civil and political institutions are ineffective. The situation may be exacerbated because one or more of the parties to the conflict opposed the final settlement or objected to the role of the peace support force, the civil implementation elements, or both. Peace-building actions are designed to cement a fragile peace, contribute towards long-term stability by encouraging reconciliation, and support economic reconstruction. The purpose of military activity will be the provision of a stable and secure environment in which civilian agencies can focus on reconciliation and peace building.

0350. **Non-Combatant Evacuation**. A Non-combatant Evacuation Operation (NEO) could be mounted as a separate operation or by an in-place force when a situation deteriorates. NEO operations are described in Joint Doctrine[5]. At the tactical level they consist of defensive and security operations to protect the operation, and specialized activities to collect, process and evacuate the non-combatants.

Enabling Activities

0351. Enabling activities link other operations. They include those intended to make or break contact with the enemy, and those conducted out of contact.

0352. **Reconnaissance**. Reconnaissance operations are those operations undertaken to obtain, by visual observation or other detection methods, information about the enemy, terrain or indigenous population of a particular area. Area and route reconnaissance are common tasks.

0353. **Security**. Security operations provide early and accurate warning of enemy operations. They provide time for a force to react effectively to the enemy; the three specific security tasks are to screen, guard and cover.

0354. **Advance to Contact**. The advance to contact seeks to regain contact with an enemy under the most favourable conditions. To achieve this, forces may be employed in both security and reconnaissance missions. The advance to contact is normally executed in preparation for a subsequent offensive operation and therefore ends when the main force is positioned for the attack.

0355. **Meeting Engagement.** A meeting engagement involves action between two moving forces. The meeting may be intentional or unintentional on either side. The dilemma for the commander is to consider how his plans may need to be modified by the unexpected. The general conditions for a meeting engagement are that neither force is prepared for defence, both are generally engaged in movement, and that there is an element of surprise on both sides.

[5] JWP 3-51, NEO.

0356. **Link-Up**. The aim of a link-up operation is to establish contact between two or more friendly units or formations which may have the same or differing missions. Link-up operations normally occur in enemy-controlled territory and may involve different kinds of forces. A typical example is a link-up between ground and air manoeuvre forces in which the former relieves the latter in place.

0357. **Relief of Encircled Forces**. The purpose of relieving encircled forces is to break through enemy positions to reach an encircled force, thus restoring its freedom of action.

0358. **Relief of Troops in Combat**. The relief of troops occurs when combat activities are taken over by one force from another. There are three types of relief operation. The first is the Relief in Place, in which all or part of a force is replaced in an area of operations by an incoming unit. The second is the Forward Passage of Lines, in which a force moves through another, for example holding a bridgehead, or attacks through a unit in contact with the enemy. The third type of relief operation is the Rearward Passage of Lines, in which a force moving to the rear passes through another unit in defence.

0359. **Withdrawal.** A withdrawal occurs when a commander seeks to disengage his force from the enemy. Contact may be maintained through such means as indirect fire, reconnaissance or surveillance. The withdrawal should be conducted so as to minimize enemy interference and preserve fighting power. The ability to move rapidly to offensive or defensive operations should always be retained.

0360. **Retirement**. A retirement is a movement away from the enemy by a force out of contact with the enemy.

0361. **March**. A march is conducted to move a military force to its place of tactical employment efficiently. Units should be prepared to come into contact with the enemy. The march is distinct from tactical movement, in which units move in battle formations and are either in contact with the enemy or expect to meet him shortly. A march can take place by road, rail or on foot. When planned and conducted efficiently, a march adds tempo to operations.

0362. **Crossing and Breaching Obstacles**. The crossing and breaching of obstacles normally occurs during offensive operations, but may also be necessary during defensive operations or enabling operations such as withdrawal. They can occur throughout the battlespace, including the rear area. They often involve a passage of lines.

Airborne, Airmobile and Attack Aviation Operations

0363. Airborne, airmobile or attack aviation operations can achieve notable success. Examples include German parachute and glider operations in Belgium and the Netherlands in 1940; Allied airborne operations in Normandy in 1944; the Israeli raid on Entebbe in 1977; the use of Apache attack helicopters to open routes through Iraqi air defences in 1991; and the seizure of the Al Faw Peninsula by 3 Commando Brigade RM in 2003. When not conducted effectively they can be costly or end in failure. Examples include the airborne operations on Crete (1941), Arnhem (1944), and Dien Bien Phu (1953).

0364. Air manoeuvre operations are more challenging than air or aviation support to close ground operations. They are invariably joint, and should be coordinated at component or corps level. They should form part of the campaign plan, since the potential gains are inevitably sig-

nificant, and there is normally potential for friendly losses on a scale which would have political impact. There are five broad conditions for success. They are not categoric, but failure to achieve one or more will tend to lead to failure:

a. Surprise should be achieved.

b. The force should be relieved, reinforced or withdrawn before surprise wears off.

c. They should be conducted as combined-arms and joint operations with effective defence suppression.

d. Intelligence should be up-to-date and accurate.

e. Airborne or aviation force should be commanded effectively in real time.

0365. The required pre-conditions for deep, long range air manoeuvre are different from those of relatively shallow penetrations. The Rhine Crossings of 1945 are a successful example of the latter, but Operation MARKET GARDEN was a deep operation where the landing force was not relieved in time. There should be an agreed procedure by which the operation is sanctioned, with a final decision point and clear authority to launch the operation. Principles and procedures for air manoeuvre operations are given in Army Field Manual Volume 1, Part 1, *Formation Tactics.*

Annex:

A. Forms of Manoeuvre

ANNEX A TO CHAPTER 3

FORMS OF MANOEUVRE

03A01. **General**. To manoeuvre is to gain a position of advantage relative to the enemy. That often requires physical movement. Movement against, or to threaten, an enemy's flanks and rear may have an impact on his morale and thereby, his will. It may assist in the achievement of surprise and shock if conducted at high tempo; that is, before the enemy can react effectively. Some forms of manoeuvre, such as single and double envelopment or turning movements, may disrupt and dislocate the defence. Envelopment may have a more direct aim: to gain a position of advantage which is the desired objective. Many, if not all, of the forms of manoeuvre can apply at any level.

03A02. **Envelopment**. Envelopment is defined as an "offensive manoeuvre in which the main attacking force passes around or over the enemy's principal defensive position to secure objectives to the enemy's rear".

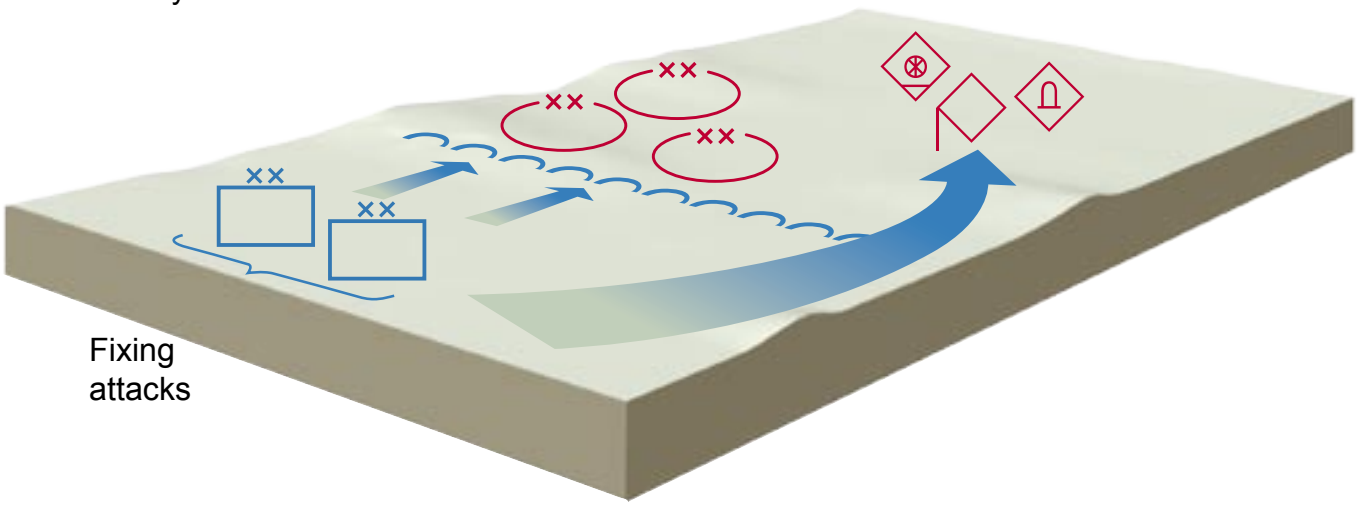

Figure 3A.1 – Envelopment

Envelopment is a basic form of manoeuvre designed to apply force against enemy weakness, and will normally require diversionary attacks against the enemy's main defensive front. Considerable speed of movement and the identification of weak points is required if the enveloping force is to be able to reach its objectives in depth. The envelopment may cause the enemy to redeploy or to withdraw. It may cause disruption to his command and control or logistic systems, or open the way to objectives which he was trying to defend. It may be undertaken in order to outflank or trap enemy forces, possibly against a geographical feature. Airmobile or airborne forces may be employed as part of an enveloping force; this is also known as a 'vertical envelopment'.

03A03. **Double Envelopment**. Double envelopment is an envelopment operation mounted on two axes which is designed to outflank an enemy from both sides with a view to forcing him to abandon of his intentions or withdraw, or as a prelude to encirclement and destruction of the trapped forces.

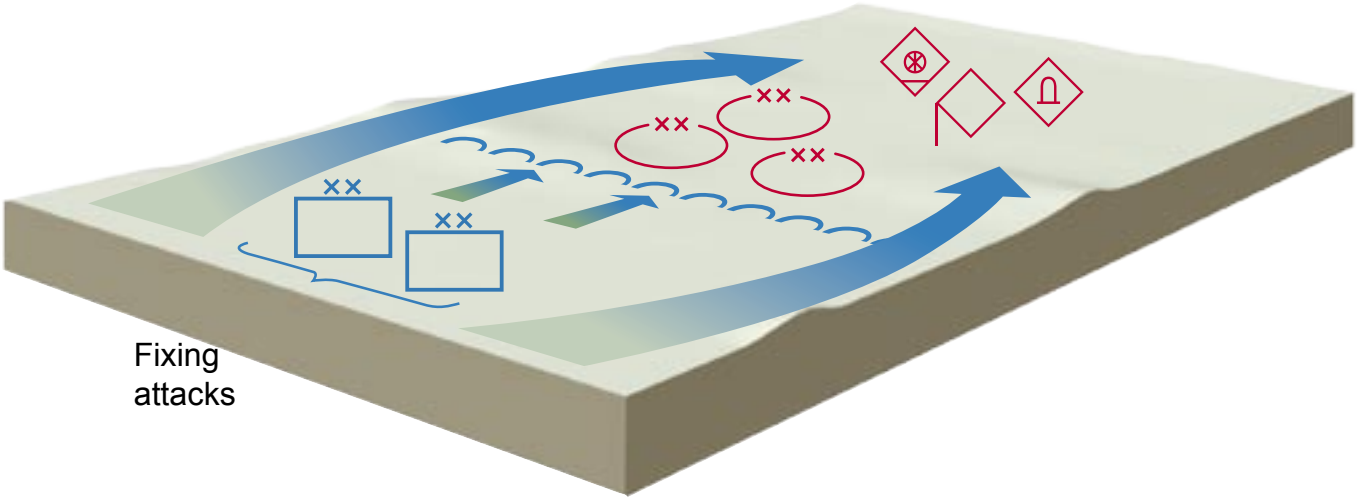

Figure 3A.2 – Double Envelopment

03A04. **Encirclement**. If the arms of a double envelopment are strong enough to meet after trapping a force and to prevent it from breaking out, large forces may be neutralized or destroyed with all their equipment. Large encirclements may be costly operations in terms both of troops and the time taken to reduce the trapped forces. Encircled forces can only be resupplied by air. Unless an early decision to relieve them by breakout or break-in is made, then resources may be inadequate to force a breakout or fight their way back to rejoin the main body.

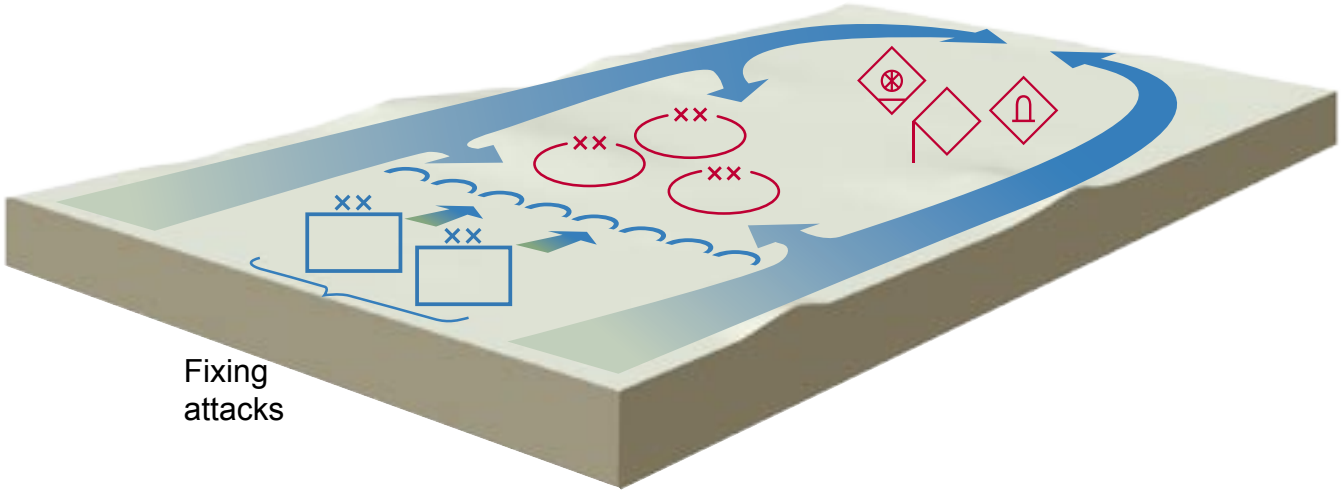

Figure 3A.3 – Encirclement

03A05. **Turning Movement**. In a turning movement the attacking force passes around or over the enemy's principal defensive positions deep in the enemy's rear to force the enemy to abandon his position or divert major forces to meet the threat. A turning movement should make those forces more vulnerable to attack, and may allow the use of an approach dominated by the abandoned positions. The attacking force is organized into a turning force, a main body and a reserve. The turning force's manoeuvre causes the enemy to leave his positions. The main body may initially

distract the enemy from the turning manoeuvre. It should subsequently exploit the success of the turning force. The turning force is normally smaller than the main body and should be able to operate independently, beyond the supporting range of the main body. Either the turning force or the main body may conduct the decisive operation.

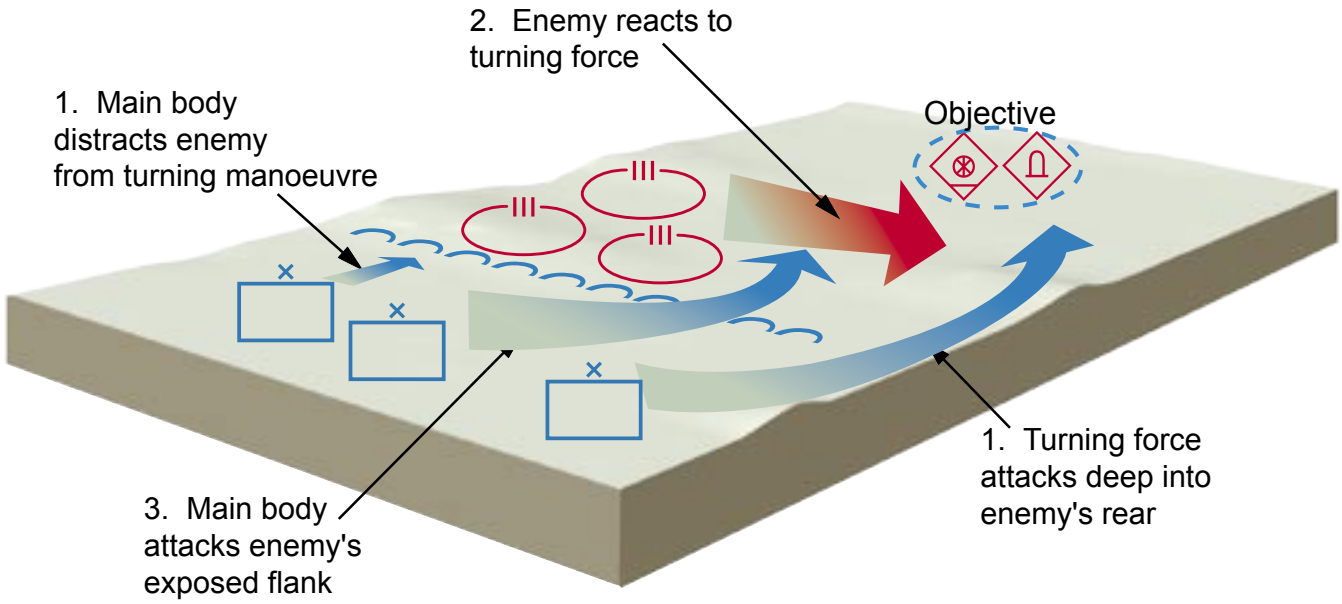

Figure 3A.4 – Turning Movement

03A06. **Penetration**. Penetration seeks to reach the depths of an enemy position on one or a number of narrow sectors. Penetration of the enemy's position may be necessary in order to achieve any of the forms of manoeuvre listed above. It has two principal variants: **deep** and **multiple** penetration. Both may be employed in the same operation. The fundamental tactic is to seek the depth of an enemy's position as rapidly as possible, preferably without fighting. This requires enemy forces to be bypassed *by design*. That creates a risk that the penetrating force may itself be attacked in its developing flanks. The fear that this might happen may cause forces to move cautiously when boldness is required. Personal example and determination will be required of commanders. The protection of the flanks of the penetrating element is critical to success, although at times protection can be afforded by the sheer speed of the penetrating force.

a. **Deep Penetration**. Deep penetration aims either to seize features or to destroy specific objectives deep in the enemy's rear. In doing so it perforates the enemy's positions, introduces a force behind the enemy, and thereby causes fear and uncertainty. It may of itself persuade an enemy commander that he has lost, particularly if the objective is critical to him. Such objectives may include river crossings behind his position.

b. **Multiple Penetration**. Multiple penetration aims to disrupt and dislocate the cohesion of a defensive position. In doing so it achieves simultaneity, presenting the defender with a number of threats. It creates multiple opportunities for surprise and shock. A classic example of multiple penetration occurred on the Western Front on 21 March 1918, the first day of the German Kaiser's Offensive. About forty-five British infantry battalions were destroyed through tactics of multiple penetration on a front of 56km. Roughly 21,000 British soldiers became prisoners of war, outnumbering the 17,500 killed and wounded. The physical and moral cohesion of those battalions had been shattered.[1] Multiple penetration

[1] Martin Middlebrook, *The Kaiser's Battle* (Harmondsworth: Penguin, 1983) pp. 204 and 322.

may bring about the catastrophic collapse of the defending force, particularly where higher-level reserves are interdicted through deep operations. However, it risks dispersion of forces for little overall effect if it is not generally successful, as the Germans discovered in April and May 1918.

c. **Combination of Multiple and Deep Penetration**. Where multiple and deep penetration are combined, the effects can be dramatic. On the Sinai front in 1967, a total of eleven Israeli brigades, operating on up to six separate axes, routed a force of about seven Egyptian divisions in less than four days. The Israelis repeatedly achieved shock and surprise; they reconnoitred aggressively; and they achieved and exploited control of the air from the opening minutes of the campaign. The destruction of command posts and offensive electronic warfare also contributed to the Egyptians' panic and collapse.

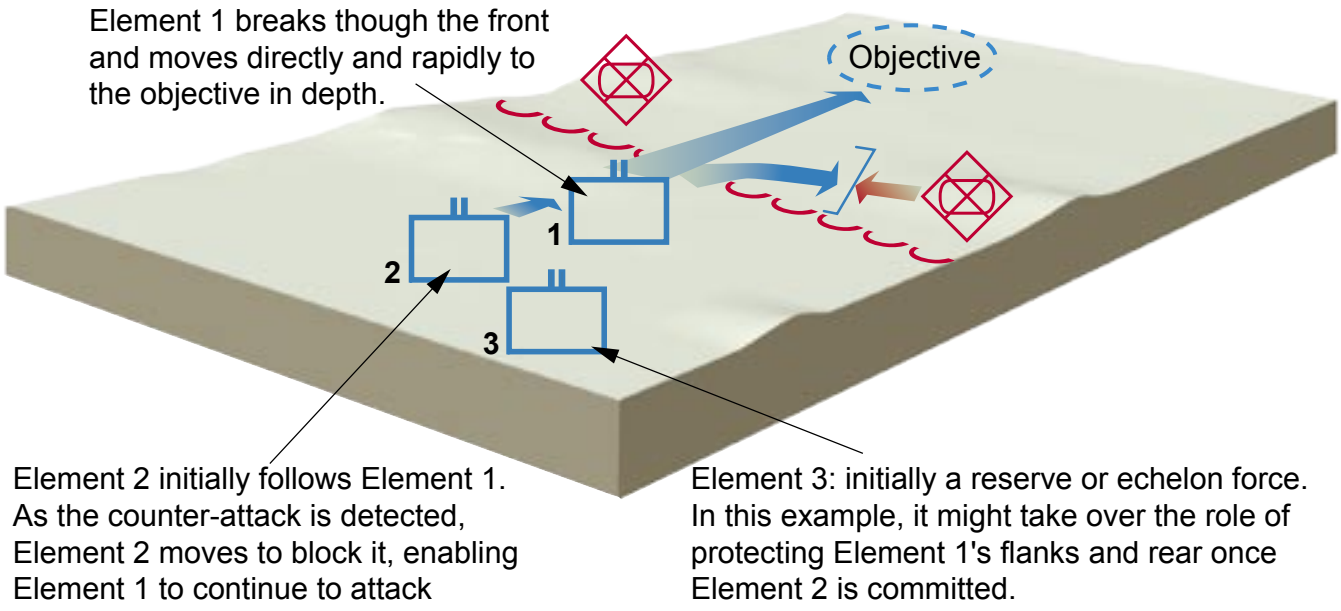

Figure 3A.5 – The Elements of Penetration

Each penetrating force will normally require at least two elements. The leading element is tasked to penetrate to the objective or limit of exploitation as rapidly as possible, bypassing opposition. The second element is tasked to follow the first in order protect its flanks and rear. Subsequent elements are reserve or echelon forces. They are tasked to destroy bypassed enemy, take over the lead of the advance, or exploit beyond the immediate objective. Penetration is unlikely to succeed against an enemy who is more agile; that is, more mobile and flexible. Conversely, it has often succeeded against a more numerous but less agile enemy.

03A07. **Infiltration**. Infiltration is penetration based on stealth. It may be used to occupy an objective in depth, or as a precursor to an attack mounted on an objective in depth. It may be single or multiple. It is not the sole preserve of veteran troops: on the night of 9-10 July 1944 the Argyll and Sutherland Highlanders of Canada, a militia battalion, occupied Hill 195, a key feature on the approaches to Falaise, through infiltration on its first night in battle.

03A08. **Mobile Defence**. In mobile defence a fixing force denies the enemy his freedom of action while a striking force manoeuvres in order to defeat him. Commanders conducting a mobile defence use terrain, obstacles, depth and deception, together with fire and manoeuvre, to encourage an enemy to focus on the wrong objective. This renders the enemy vulnerable to attack. Therefore depth, time and the ability to manoeuvre are particularly important factors in the conduct of mobile defence. Successful mobile defence requires rapid switching between activities, and a readiness to concede ground where appropriate.

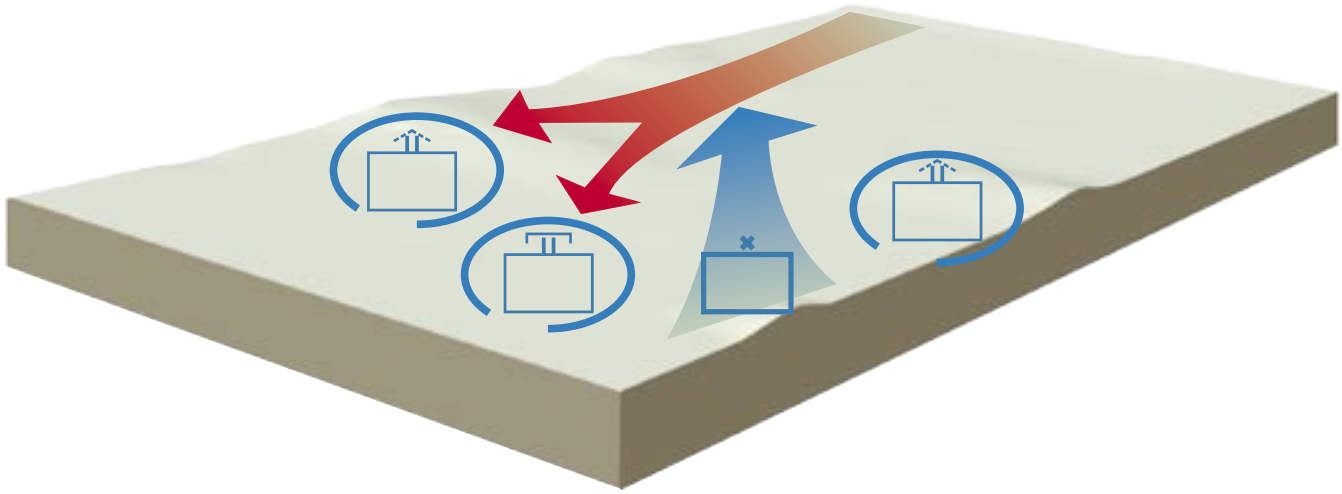

Figure 3A.6 – Mobile Defence

03A09. **Area Defence**. The purpose of area defence is to hold ground or deny it to an enemy. Unlike mobile defence, a force committed to area defence does not seek the destruction of the attacking force. Instead, it relies on a separate but coordinated attack by other forces to deliver tactical success. In area defence, commanders employ their forces in a framework of static and mutually supporting positions, supported by counter-attacks at all available levels. The balance between static and counter-attack elements is largely dictated by terrain. The closer the terrain, the greater the proportion of counter-attacking forces and the lower the level at which they should be employed.

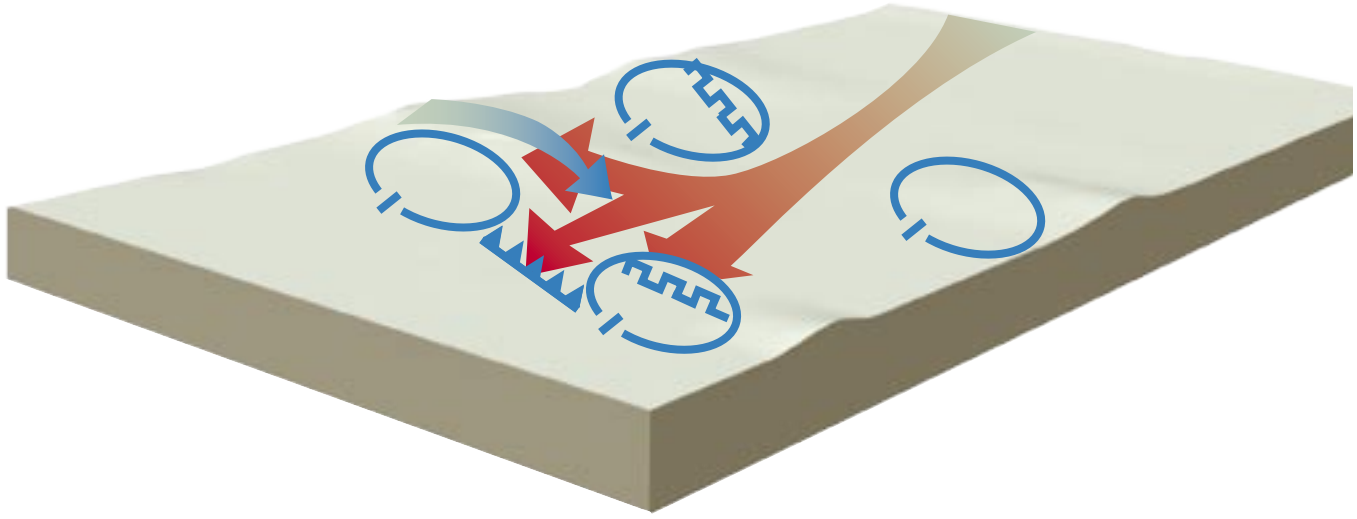

Figure 3A.7 – Area Defence

03A10. **Defence by an Encircled Force**. An encircled force may break out, exfiltrate towards friendly forces, attack deeper into the enemy, or defend itself. The purpose of defending an encircled force may be to retain ground or draw enemy forces as part of a larger manoeuvre, or to preserve the combat power of forces unexpectedly encircled and unable to break out or exfiltrate. An encircled force may conduct either an area defence or a mobile defence if it has sufficient fuel. The key consideration in organizing the defence of an encircled force is to anticipate how the enemy will attempt to split the force and reduce it piecemeal.

03A11. **Integrating Forms of Manoeuvre and Land Operations**. Although individual operations or forms of manoeuvre may lead directly to the achievement of the mission, it may be necessary to integrate them into a larger scheme of manoeuvre. Similarly, forms of manoeuvre will often need to be divided into separate tactical tasks. For example, an encirclement will typically require at least two penetrations, exploitation into the enemy's depth, and a link-up operation. That may be followed by defence of the outer flanks of the encirclement, and either attack or defence on the internal flanks. Physical manoeuvre allows the manipulation of both the threat and the use of force. Operations against flanks, the rear, to bypass or to penetrate allow the creation of shock and surprise at several levels, and hence the possibility of command paralysis and collapse. Any penetration is an opportunity for aggressive exploitation. Manoeuvre is not limited to offensive operations – the most skilful counterattacks have often in effect been turning movements. Such movements compel an attacker to desist from his attack, and create a threat to the rear of his forces.

CHAPTER 4

LAND FORCES IN THE JOINT CAMPAIGN

The purpose of this chapter is to describe how land forces interact with others, examining the implications for land forces of operating in a joint and multinational environment. [1]

OVERVIEW

4.1 The Joint Campaign

Organization

0401. Expeditionary campaigns are conducted by Joint Task Forces (JTFs) created specifically for an operation. JTFs are tailored to a mission, with the capabilities necessary to achieve specified operational-level objectives. They are usually multinational and their titles differ depending on the alliance or coalition involved. Within NATO, an operational-level commander of an Allied Joint Force or Combined and Joint Task Force (CJTF) is generically termed a Joint Force Commander (JFC).

0402. Joint Task Force. A JTF consists of a headquarters and a number of components, such as maritime, land, air and special forces. There may be enablers specific to the mission such as joint logistics, psychological operations or rear area operations. JTF headquarters plan and conduct the campaign and major operations at the operational level. Components prosecute and coordinate battles and tactical engagements to achieve operational-level objectives. Components are normally created for a specific campaign and are likely to be multinational. Therefore the joint force commander, his component commanders and their staffs may not have worked together before. Furthermore, United Kingdom land forces may work within a land component under the command of a coalition partner and may be supported by contingents from other nations.

0403. Supported and Supporting Commanders. Components work together using the 'supported/supporting' relationship to maximize the overall effect of the joint force. A *supported* commander has primary responsibility for all aspects of a task assigned by higher authority. A *supporting* commander provides augmentation or other support to a supported commander, or develops a supporting plan. Land forces may receive support from, or give support to, other components for each joint objective in a campaign.[2]

[1] Joint doctrine at this level is articulated in JDP 01 *Joint Operations* (Edition 1), JWP 3-00 *Joint Operations Execution* (Edition 2), and JWP 5-00 *Joint Operations Planning* (Edition 1).

[2] See JDP 01, Paragraph 332 for further details

Planning and Executing the Joint Campaign

0404. A campaign is a set of military operations planned and conducted to achieve a strategic objective within a given geographical area. These operations normally involve maritime, land and air forces. JTF commanders use campaign plans to focus operational activity in order to achieve strategic objectives (the *ends*). They design a sequence of actions to achieve success (the *ways*), and apply resources to accomplish this sequence (the *means*). They integrate the actions of available military and non-military forces to achieve synergy at the operational level.

0405. A campaign plan is inherently joint. Campaign plans are developed by JTF staffs in collaboration with component staffs. The land, air and maritime component headquarters should not produce their own campaign plans but contribute to the joint campaign plan. Collaboration between JTF and component staffs is essential. Only components have a detailed understanding of how they will play their part in achieving a joint objective, their impact on other components, and their impact on the joint plan as a whole. Planning is therefore conducted in parallel and there is a significant requirement for liaison between the JTF HQ and other component HQs. Synchronization during the execution of an operation is achieved through liaison teams and the joint coordination process. Further details of land component responsibilities and processes are at Annex A.

0406. **Operations in the Joint Campaign**. The adoption of the Manoeuvrist Approach in joint operations is typically characterized by a combination of the following operations, which are normally conducted in a joint and combined manner. They do not necessarily follow this sequence:

a. **Joint operations to achieve and maintain control of the air**. Control of the air represents only one aspect of establishing freedom of manoeuvre on land. Joint operations may set the conditions for, or constrain, operations on land.

b. **Deception operations aimed to shape the enemy's understanding of the situation**. These encourage the enemy to act in a way that prejudices his interests. Deception measures should distort his view of events or to blind him as to our real intentions. Reinforcing an enemy's pre-conceptions often forms the basis for successful deception.

c. **Information Operations designed to weaken the enemy's will**. In major combat operations, such activities are predominantly focused on undermining and defeating the enemy's will. In other types of campaign, such as COIN, Information Operations may need to be focused primarily on the local population. In such cases they should be aimed at reducing the level of support and sanctuary afforded to insurgents.

d. **Limited combat operations**. Activities such as raids are designed to threaten or appear to threaten an enemy, to attack his sense of security, and leave him more vulnerable to subsequent attack. Such operations, primarily designed to shape his understanding by confusing and outwitting him, may also contribute to attacking his moral and physical cohesion.

e. **Sustained and large-scale operations to shatter the enemy's cohesion and break his will**. These should lead to his defeat. Such operations usually require a combination of defensive and offensive measures, coordinating firepower and manoeuvre to achieve shock and surprise. Out-manoeuvring the enemy involves placing him where he can no longer respond coherently and effectively to one's actions.

f. **Activities and operations to protect the cohesion of own forces**. These include operational security measures, which prevent the enemy understanding one's intentions. They also include physical force protection measures. The maintenance of morale is key to sustaining cohesion. It is achieved through unity of purpose, a belief in a common and worthwhile cause, leadership, and the anticipation of success.

g. **Media operations**. These are aimed at moulding the opinion of friendly forces, host nations and force contributing states, as opposed to psychological operations which target the enemy. They also have a key role in protecting and fostering the cohesion of the force. In multinational operations, maintaining the cohesion and will of the allied or coalition force is vital.

The Land Component

0407. Land forces within a JTF are normally grouped within a land component, although forces may be allocated to other components for specific tasks. Amphibious forces, when ashore, may also be allocated to a land component.

0408. **Terminology**. A land component commander is normally termed a 'joint force land component commander'. On coalition operations, particularly those with a US lead, he may be a 'coalition force land component commander'. This publication uses the generic titles of 'land component commander' and 'land component command'. Where there is a national contribution to a larger coalition or alliance land component, it is termed a 'national land contingent command'. Practices for the command of land components and land contingents are described in Annex A.

0409. **Relation to the Levels of Warfare**. The distinction between strategic, operational and tactical levels is seldom tidy. Even if an element of a multinational land component is of small tactical value, its employment may have strategic impact for the nation that provides it. Therefore a land component commander should understand the strategic and operational implications of his decisions when directing tactical actions. A land component command can in part be regarded as an operational-level headquarters. It normally lies on the interface of operational and tactical levels. Its commander and staff should have a deep understanding of operational art and the role of the land component in the operational context. They will be expected to contribute to the design of campaign and understand the roles and capabilities of other components. This position within the levels of warfare is illustrated in Figure 4.1.

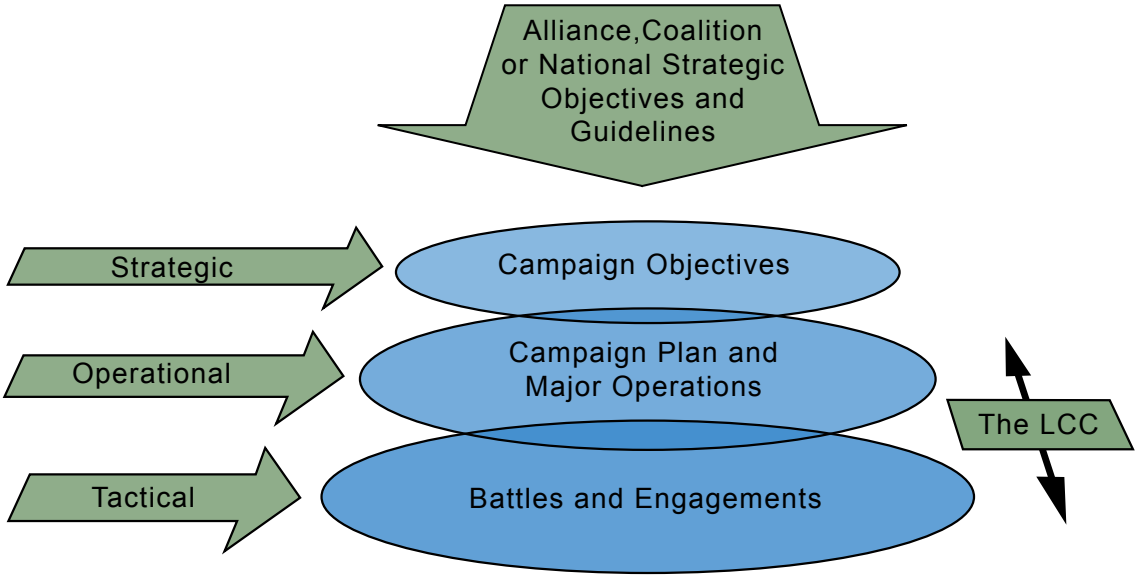

Figure 4.1 – Land Component Command and the Levels of Warfare

4.2 Joint Air/Land Operations

The Role of the Air Component in the Joint Campaign

0410. Of the interfaces between air, land and sea, the most important for the Army is that between air and land. Gaining, maintaining, and exploiting control of the air is critical to success in most land operations. Understanding how air and land forces interact should therefore be common to both the Army and RAF, and the principles of air/land operations described here are replicated in RAF doctrine.[3]

0411. **Combat Air Operations**. Air power is fundamental to success in joint operations. It exploits the enduring characteristics of height, speed and reach to operate flexibly across the continuum of operations. Combat air operations fall into three categories: counter-air, anti-surface force air operations, and air operations for strategic effect:

a. **Counter-Air**. The aim of counter-air operations is to achieve and maintain the required degree of control of the air, defined by three levels:

(1) **Favourable Air Situation**. A favourable air situation is one in which the extent of air effort applied by an opponent's air forces is insufficient to prejudice the success of friendly maritime, land or air operations.

(2) **Air Superiority**. Air Superiority is defined as the degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related sea, land and air forces at a given time and place without prohibitive interference by the opposing forces.

(3) **Air Supremacy**. Air Supremacy is defined as that degree of air superiority wherein the opposing air forces are incapable of effective interference.

b. **Counter Surface Operations**. Counter surface operations, in cooperation with

[3] In AP3000, *British Air Power Doctrine*, containing the principles of UK air power doctrine.

Arab-Israeli Wars (1967 & 1973)

On 5th June 1967 Israel launched a pre-emptive attack on Egypt and Syria: in the south their operational objective was the seizure of Sinai. Israeli planners recognized that control of the air was fundamental to the success of the assault on Egyptian defences in Sinai, so the opening phase of the war was a surprise attack against the Egyptian Air force before it had a chance to deploy. By the end of the first day of what turned out to be a six day war, the Egyptian Air Force had effectively ceased to exist, with almost 70% of its combat strength destroyed. Air supremacy allowed Israeli armoured columns almost total freedom of movement in their attack into Sinai: they were able to manoeuvre freely to attack Egyptian positions from the flank and rear, and mass overwhelming strength against individual Egyptian formations. Reconnaissance could roam with impunity through the depth of the Egyptian position, without fear of detection or interference from the air. When the defence broke, Israeli jets and attack helicopters caused great damage to the fleeing Egyptians who had no means of defence from this attack from the air.

By 1973 the situation had changed dramatically. The Egyptians had undergone radical re-equipment, and were on the strategic offensive. It was they who achieved surprise by their Yom Kippur crossing of the Suez Canal on Saturday 6th October 1973. Egyptian planners knew that they could not hope to destroy the Israeli Air Force on the ground, as had happened to them in 1967; instead they planned on limiting Israeli freedom of action in the air through a comprehensive air defence network of SAMs through the entire depth of the Egyptian position. As a result the Israelis could not create general air superiority, and for some time the result of the campaign was in the balance. One of the main objectives of the Israeli Chinese Farm counter-offensive across the Suez Canal on 18th October was the destruction by land forces of a section of the Egyptian SAM system – this permitted localized air superiority and an opening of an air corridor into the Egyptian rear. The Egyptians agreed a ceasefire shortly afterwards.

Drawn from Peter Young, *The Israeli Campaign 1967* (London: William Kimber, 1967) and Maj Gen Chaim Herzog, *The Arab-Israeli Wars* (London: Arms & Armour Press, 1982)

maritime and land forces, shape the battlespace by deterring, containing, defeating or destroying enemy forces. They can be either direct or indirect. Close Air Support is an example of direct air operations. It is defined as 'air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces'. Air Interdiction is an indirect air operation to destroy, disrupt, neutralize or delay an adversary's military potential before it can be brought to bear. Air Interdiction is conducted away from close proximity to friendly forces and thus requires coordination but not the tight control needed for Close Air Support.

c. **Air Operations for Strategic Effect**. Air operations for strategic effect attempt to influence the opponent's strategic centre of gravity directly. They can be used for making political signals, to coerce an opponent, or as a discrete element of a joint campaign.

0412. **Other Air Operations**. Most Combat Support Air Operations directly concern the land component, and their capabilities should be understood when planning and conducting operations. They include Aerospace Surveillance and Reconnaissance, Electronic Warfare and Air Transport, including support helicopters.

The Need for Air/Land Synergy

0413. All assets available to a JFC should interact to achieve the greatest joint effectiveness, measured against operational-level objectives. There should therefore be high levels of synergy between air and land forces. The problems of interaction are greatest in high-intensity joint operations.

0414. Three levels of interaction are possible. ***Deconfliction*** divides responsibilities in time and space. It avoids fratricide and duplication, but does not contribute to synergy. ***Coordination*** requires air and land forces to act together to achieve shared objectives. It prevents fratricide and duplication, and ensures that effects complement each other. ***Integration*** brings the parts together to create a whole and occurs when the effects of air and land operations are planned from the start to reinforce each other. It typically requires faster and more precise planning, with real-time communications and liaison.

0415. The airman's perspective is typically theatre-wide. Airpower can be switched readily across a theatre from strategic to tactical attack. As a result, airpower is normally commanded at theatre level for greatest effect. Conversely, ground forces are normally controlled through several echelons of command, principally due to the complex environment and the human limits of the span of command. These differences impact on the practices and procedures by which air and land forces are applied.

0416. The impact of airpower may appear transitory to the soldier, whose perspective is typically localized and sequential. The effect the airman leaves behind may be sudden, dramatic, and critical. The soldier views tactical success as being best delivered by the sudden application of violence, preferably in a way that surprises the enemy. This can frequently be delivered or significantly augmented by airpower integrated with ground manoeuvre. To the soldier, tactical results are achieved in obvious and local ways through the effects of prior activities. The airman moves rapidly through and out of his view of the battlespace. To the airman, the physical location of the target is perhaps less important than the effect which attacking it produces. However, even in a non-linear battlespace, the concepts of deep, close and rear areas retain concrete meaning to a ground force.[4]

0417. Aircraft display great flexibility, but the flexibility of an air component requires balance between efficiency and effectiveness. Greatest *efficiency* arises when all assets are allocated to pre-planned targets; but greatest *effectiveness* in the support of land forces requires flexible response to ground targets, which may be inefficient in terms of air sorties. A balance should be struck between pre-planning and responsiveness. This balance should be determined from the campaign plan and change as the campaign progresses.

Interaction

0418. Combat is complex, dynamic and unpredictable, and the area immediately around a land force especially so. There will be a zone around any land force in which there is risk of air and land fratricide. That zone will have three broad areas. The closest will be that in which the ground force can easily observe and fire its principal weapons, and into which it might move rapidly. Close combat with the enemy will normally take place in this area. The next area will be that into which the land force can observe and fire long-range weapon systems. Friendly ground reconnaissance units may be found in this area. Furthest out is the area into which the ground force can project force or create effects only occasionally, and after considerable planning. Deep aviation attacks, airmobile, airborne, or SF operations and very-long-range missile strikes are examples of land operations in this area.

0419. These three areas require differing degrees of interaction between ground and air components. Their sizes depend on concrete factors like weapons ranges and topology. They will change over time as the ground force manoeuvres. Measurable, defined parameters should be

[4] See Chapter 3, Paragraph 0331.

The Desert Air Force (1942-43)

It would be difficult for me to pay an adequate tribute to the work and achievements of the Desert Air Force; suffice it to say here that the Desert Air Force and the Eighth Army formed one close, integrated family: collectively they were one great fighting machine, working with a single purpose, and at all times with a single joint plan.

Field Marshal Bernard Montgomery, *El Alamein to the River Sangro* (London: Hutchinson & Co, 1948), p. xi

(The Desert Air Force's) cooperation with the 8th Army did not come by accident; it was organized …

The A.O.C. and G.O.C. shared the same mess, and this liaison was maintained by similar arrangements between the A.O.A. and the A.Q.M.G. … Army Operations Room and Air Operations Room were always adjacent. Army liaison officers were attached to the A.H.Q. Operations Room and to all Group and Wing H.Q. Operations Rooms … R.A.F. officers were attached to armoured divisions … Equipment and supplies for both Services were likewise linked. Thus the basis for army/air cooperation had been firmly laid.

Roderic Owen, *The Desert Air Force* (London: Hutchinson) pps. 110-111

Figures 4.2 & 4.3 – RAF Operations, North Africa, 1942-43

used to plan the control measures associated with them. As a minimum, tactical air and land operations should be *integrated* in the inner zone, *coordinated* in the middle zone and *deconflicted* in the outer zone. The staff procedures required for each zone will vary, particularly the need for timeliness. Higher levels of interaction may be desirable but tend to reduce freedom of action. They also require resources and take time.

0420. To some extent the increased range of modern ground–based weapons appears to have reduced the meaning of geographical control measures and particularly control *lines*. However, they continue to be useful. They ensure that systems that can create effects far beyond the location of ground forces are truly integrated at campaign level, thereby reducing fratricide and avoiding duplication.

0421. Control measures, and particularly control lines, have both spatial and temporal significance. A practical balance between three factors should be sought when considering the location of control lines. The first is the distance of the control line from land forces. The second is the rate at which land forces can move towards or away from that line. The third is the speed at which changes to control measures can be promulgated across the joint force. Situations where the freedom of action of air and ground forces is unnecessarily constrained should be avoided. Specific structures and processes should exist to provide control wherever tactical air and land operations interact. These structures and processes require manpower, staff work and CIS. These resources should be trained and exercised to achieve high degrees of efficiency, since inefficient staff processes impose time delay to the detriment of synergy.

The 1991 Iraq War and the Fire Support Coordination Line

After Operation DESERT STORM ended on 28 February 1991, it became clear that half the Republican Guard's equipment had not been destroyed and the majority of the fleeing Iraqi Army escaped to the area south of Basra. Many avoided destruction or capture because the Fire Support Coordination Line (FSCL) was misplaced and procedures for its alteration were insufficiently agile. This created large areas where Iraqi forces could move with impunity, beyond reach of land systems but short of the line where air forces could attack them freely; or alternatively prevented land systems (such as attack helicopters) from operating where they would be more effective than fixed wing aircraft. There were many examples; two are given below.

On the night of 26/27 February, VII Corps attack helicopters attacked Objective MINDEN over a five hour period 2100-0200 hours. The Corps Commander wanted also to attack Highway 8, the Iraqi escape route, and at 2000 hours requested a move of the FSCL to the east to allow him to do this. He found it would take several hours to shift the FSCL by which time it would be too late, allowing much Iraqi armour to escape.

The second example occurred on the afternoon of 27 February, when the FSCL had been shifted to the east of Highway 8, in anticipation of rapid land force advance into the area. In the event, land forces were slower than predicted, and there was no ability to direct air attack onto the mass of Iraqi Army units fleeting up the coastal road. Attempts were made to shift the FSCL once more to the west, but by this stage CENTCOM had assumed direct responsibility for the FSCL and declined to move it again. This permitted a 14 hour window for Iraqi columns to escape, free from air attack.

Drawn From: Tom Clancy with General Fred Franks Jr, *Into The Storm: A Study in Command,* (New York: G P Putnam's Sons, 1997) and James Dunnigan & Austin Bay, *From Shield to Storm*, (New York: William Morrow, 1992)

0422. To be relevant at the campaign level air and land operations should be integrated so that they contribute synergistically to the operational-level functions of the Manoeuvrist Approach: *shaping* the joint battlespace, *attacking* the enemy, *protecting* the joint force, and then *exploiting* success to achieve the objectives of the campaign. The following sections describe how air and land forces interact to achieve these operational functions.

Shaping the Joint Battlespace

0423. Gaining the required degree of control of the air is a critical part of shaping the battlespace. It protects friendly forces from air and missile attack and maintains freedom of action. It is important to define and achieve the appropriate level of control[5] in time and space. Soldiers should see this as a critical precursor to effective ground operations. Land forces contribute to gaining control of the air by destroying and suppressing enemy air defences as required.

0424. Air and space sensors contribute to ground intelligence. They include photo reconnaissance aircraft, airborne radar, satellite and other systems. The resulting intelligence can have a major impact on the conduct of ground operations, particularly when it identifies location and movements of enemy operational reserves. Control of the air also denies intelligence to the enemy through the denial of airspace to his airborne sensors and attacks on his long-range ground sensors. The denial of such intelligence reduces an enemy's ability to react effectively to land operations.

0425. At the campaign level, ground forces may help shape air operations by seizing air bases or locations from which air operations can be conducted. Simplistically, airbase location dictates range and sortie rate, although air-to-air refuelling affects the overall reach of airpower. The Pacific Campaign of 1943-45 was designed around the seizure of islands to establish air bases, each one extending the coverage of Allied airpower towards Japan.

The Destruction of The Medina Division (March 2003)

By 31st March 3rd Infantry Division had approached the Karbala Gap, on their wide outflanking move to the west of Baghdad. The Medina Division of the Republican Guard had been tasked with blocking the route to Baghdad from the south, its defensive positions effectively hidden in urban areas and dense vegetation. However, it was about to be outflanked by the American advance, and so it was ordered to move and hold a defensive position facing west. The move took place during the sand storms of late March; but nevertheless they were easily detected by aerial radars, and over the period of three days were comprehensively attacked from the air. V (US) Corps estimate that the Medina Division started their move at about 92% combat effectiveness. By the end of the move, they had been reduced to about 29%; they had been effectively destroyed as a division. As a result, there was no effective Iraqi defence of the Euphrates crossing points, and the way to the seizure of Saddam International Airport to the west of Baghdad was open.

This is a good example of land/air synergy. The Medina Division was placed on the horns of a dilemma: either stay put and be outflanked by 3rd Infantry Division; or move to face the land force and risk destruction from the air.

Taken from "Joint Fires in OIF: what worked for the Vth (US) Corps"
Presentation by LTG W S Wallace Commander US Army Combined Arms Center

[5] See Paragraph 0411a for definition of the levels of air control.

0426. Land and air forces acting together compel an enemy to make difficult decisions. He must choose either to remain hidden from air attack and fail to counter ground manoeuvre, or to react to such manoeuvre and increase the visual, thermal, radar and radio signatures by which the air component can identify, locate and attack him. This is a good example of synergy and demonstrates the importance of achieving control of the air. Furthermore, when the enemy is engaged on land his logistic consumption increases, presenting useful targets on his lines of communication.

Attacking

0427. Air attack on ground forces causes delay, disruption and attrition. Attrition may be important of itself, whilst delay and disruption may be even more important at the campaign level. Airpower should be concentrated in time and space for greatest effect. When supporting land forces, this means prioritising between formations. Some ground forces will thus be at lower priority for air support. This should be expected, regardless of the apparent tactical need at the time. Importantly, air attack may take place far from where ground forces are in contact. This may not be apparent to friendly ground forces, but can be critical from a campaign perspective. It may also weaken enemy ground forces sufficiently to alter force ratios at the point of contact, and contribute directly to land tactical success.

0428. A deployed ground force usually consists of numerous elements which are dispersed over a wide area. To defeat it, it is usually more effective to persuade its commander that he is beaten than to rely on attrition of its elements. Persuading an enemy commander that he is beaten can be achieved by the sudden application of concentrated violence which is then exploited rapidly. Combined air/land forces excel at this: airpower can deliver sudden and concentrated firepower, permitting land forces to seize objectives rapidly while the defenders are incapacitated. Thus the critical measure of effectiveness for air support to land forces is not the quantity of explosive delivered or targets hit, but rather the extent to which land forces can exploit its results. This requires close coordination in time and space to ensure that the transient effects of shock and surprise are not wasted.

0429. Overrunning or destroying elements of enemy ground-based air defences contributes directly to the effectiveness of airpower. It opens corridors through which aircraft can penetrate to the enemy's depth. Ground forces can also overrun or raid enemy air bases, materially reducing enemy air power. The loss of aircraft on the ground may be significant, but the effect on range and sortie rates may ultimately have a greater effect as the opposing air force is forced to use air bases further away.

Protecting

0430. Protecting the freedom of action of one's own ground forces is the converse of denying the enemy's. It assists the committal of tactical and operational reserves and preserves the ground force's effectiveness by protecting it from aerial attrition. Air forces have the flexibility to counter local reverses or exploit unexpected successes on land. These are typical tasks of a reserve, and having control of the air permits a land commander to dedicate fewer forces to reserve missions. Ground-based air defence primarily protects ground forces but also contributes to theatre-wide air defence. It prevents or reduces ingress at low levels, denies or reduces the enemy use of UAVs and cruise missiles, and contributes to the protection of support helicopters, air transport, and airbases.

Exploiting

0431. Joint forces should seek to exploit tactical gains on the ground or in the air, transforming local success into wider operational-level achievement. Exploitation will typically require ground manoeuvre, which should be anticipated and where possible pre-planned. Ground exploitation allows further destruction of enemy ground-based air defences, and greater control of the air. Gaps in enemy air defences should be widened and exploited to penetrate his depth. As enemy command systems are damaged, communications security may be lost and further intelligence gained. Air forces can harass broken enemy forces and keep them on the run. The effective coordination of air and ground actions should lead to an increase in the tempo of ground operations. However, in some circumstances only airpower has the speed, range and responsiveness to maintain contact with a fleeing enemy or slow him for subsequent defeat by ground forces.

4.3 Maritime/Land Operations

0432. Over two thirds of the world's population live within 200 km of the sea. 85% of the member states of the United Nations have a coast and are accessible to operations mounted from the sea. At a speech at the Royal Academy in October 1903 the future First Sea Lord, Admiral Fisher, described the Army and Marines as "a projectile to be fired by the Navy". Although the purpose of much naval activity is thus to enable land forces to operate overseas, some maritime tasks such as strategic deterrence and security of trade routes are largely unrelated to land operations.

0433. **The Role of the Maritime Component in the Joint Campaign**.[6] The principal characteristics of maritime operations are access, reach, versatility and sustainability. The ability to remain poised at sea for extended periods as an act of coercion, and the subsequent translation of this into direct action against targets ashore, is a capability that is unique to maritime forces. The major categories of maritime operations are power projection, sea control and other tasks such as deterrence, demonstrations of presence, intelligence collection and maritime counter terrorism.

0434. **Amphibious Operations**[7]. When operating in or near the littoral[8], land forces may be complemented by a range of amphibious operations. *Amphibious demonstrations* can tie down enemy forces near the coast and weaken defences elsewhere. This occurred in Operation DESERT STORM in 1991, where a United States Marine Corps demonstration in the Persian Gulf played a major part in a deception designed to hide VII Corps's attack on the main effort inland. *Amphibious raids* can distract or confuse an enemy, destroy key elements of his infrastructure, gain intelligence, or rescue hostages or other personnel. *Amphibious assaults* can open access to a theatre for land forces, such as the D Day Normandy landing in June 1944. They can open another flank in an existing theatre, such as the Inchon landing in Korea in September 1950. In either case, it is usual for land forces to reinforce the amphibious landing once established, permitting further exploitation inland. *Amphibious evacuations* might be the only practical means of extracting a land force, especially following an unexpected setback, such as the 1940 Dunkirk evacuation.

[6] This section draws on BR 1806, *British Maritime Doctrine*.

[7] "A military operation launched from the sea by a naval and landing force embarked in ships or craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile." (ATP-8B, *NATO Doctrine for Amphibious Operations*).

[8] "Coastal sea areas and that portion of the land which is susceptible to influence or support from the sea." (BR 1806).

0435. **Sea-based Joint Fires**. Maritime-based aircraft can contribute to the full range of air operations described in Paragraph 0411. In some campaigns maritime-based aircraft may be the only air support available, such as during the 1982 Falkland Conflict. In such cases the protection of aircraft carriers becomes a significant priority for the joint commander. Submarines and surface ships armed with land attack missiles contribute to attacks on important shore targets. Naval systems can provide fire support to all operations within range of the sea, which may be especially important in the early stages of a campaign before ground forces have fully deployed.

0436. **Other Support to Joint Operations**. Maritime platforms can contribute significant intelligence, area surveillance and communications capabilities to the joint force. They can also provide air defence over littoral areas, including against theatre ballistic missiles. It is also possible to provide logistic support for land forces from the sea, and so reduce the logistic footprint required ashore. Maritime forces can assist in protecting joint forces or territory by providing a sea-based defensive barrier, or by defending against enemy manoeuvre from the sea. Maritime platforms may also be used as command and control locations by joint or land headquarters at all stages of a joint operation.

0437. **Threats to Maritime Operations in the Littoral**. When operating close inshore with limited sea room, maritime units may be threatened by mines, fast attack craft and shore batteries. Land forces ashore can enhance the protection of inshore maritime units by securing potential firing or launching points and the destruction or capture of enemy coastal artillery or missile batteries.

4.4 Other Components and Enablers

0438. **Special Forces**. In the United Kingdom, Special Forces are grouped together in a joint organization comprising the regular and reserve units of the Special Air Service, the Special Boat Service, and other specialist assets. In all cases, a decision to deploy them is only made at a level where the joint commander has access to consideration of political and diplomatic risk, intelligence assessments, the campaign plan, military factors, force levels and information policy. This will normally be at the strategic level. Special Forces should not normally be employed on tasks which can be conducted by other combat forces and should never be employed on general defensive tasks. They should be used on operations which provide a high return for the expertise, expense and resources committed and the risks involved. Their operations will often be supported by land assets, such as light infantry and attack helicopters.

0439. **Joint Logistics**. A Joint Force Logistic Component may be created to coordinate support forward to other components and rearwards to the strategic home base. As with the other components, it is task-organized as a result of the military-strategic estimate. The logistic component may be built around an existing land logistic formation. The interaction between the logistic component, the land component, and national logistics is explained further in Chapter 5.

0440. **Joint Enablers and Operations Support Activities**. JWP 3-00 describes a number of activities that underpin joint and component level operations[9]. Operational Support Activities[10] frequently play a significant part in the campaign plan. If they are not lines of operation themselves, they may well support others. Joint Enablers[11] underpin other activities. Both are likely to have specific staffs within higher-level headquarters.

4.5 Operating in Alliances and Coalitions

The Nature of Multinational Operations

0441. A multinational operation combines forces of more than one nation. If the operation is not conducted within an alliance such as NATO, the individual members are usually termed coalition partners. They may have differing political orientation and cultures but should at least have temporarily merged their capabilities and submerged their differences in the interest of a common goal. A coalition will only remain in being as long as sufficiently strong mutual interests exist in undertaking a common military enterprise. Command structures may be ad hoc and procedures may follow either alliance practice or that of a lead nation. The reasons for establishing a commitment to a common military goal may vary, but the aim is usually to accomplish an objective which nations do not wish to, or could not, achieve unilaterally. Depending on the circumstance, there will be differing degrees of national interest at stake, and the strength and nature of the contribution to the multinational operation will depend upon this. Nations participating in multinational operations do so for reasons that are viewed as nationally advantageous in political and military terms. Thus contributions should be judged not only on the capability of the forces provided but also by the range of political benefits, they bring to the alliance or coalition operation.

0442. **Advantages**. The political advantages of multinational cooperation include: sharing political risks; demonstrating economic, diplomatic, military or political support to other regions; and influencing national and international opinion. The military advantages are that cooperation adds both strength in numbers and additional capabilities to a force. It also provides access to national or regional logistic infrastructures and, in certain circumstances, access to high value information and intelligence.

0443. **Challenges**. Multinationality poses challenges, the early resolution of which is crucial to military effectiveness. These include the formation of an effective command and control system, an intelligence system which can draw and share data from a number of sources, and a logistic system which meets both national and multinational needs. Multinational command may lead to slower response times than purely national command arrangements, and the quality of decision-making may become adversely affected. Such detrimental effects can be counteracted through the adoption of common doctrine and procedures together with realistic training. Therefore multinational command requires a mindset that is international in perspective. Differences in operating procedures, language difficulties, technical incompatibilities and a lack of standardization may occur and should be anticipated.

[9] JWP 3-00 Paragraphs 229-231 and Annexes 2D, 2E.

[10] Operations Support activities are: Information Operations; Targeting (including Joint Fires); Media Operations; CIMIC; and Force Protection.

[11] Joint Enablers are: Operational Intelligence; Intelligence, Surveillance and Reconnaissance; Combat Identification; Logistics; Political & Policy Advice; Legal Advice; Information Management and CIS; Integrated Mission Support; Budgets & Accounting.

Command in Multinational Operations

0444. **Approach**. The command of forces from other nations requires particular skills and attributes. Commanders should understand the cultural background of the troops involved and the conditions under which they are provided by the sending nations. Personal contact with contingent commanders from these nations should occur as early as possible. The commander of a multinational force should gain the confidence of other national contingents as rapidly as possible and should ascertain national constraints, which are known colloquially as 'red cards'. The use of suitably trained and equipped liaison teams is essential. Overcoming the inevitable frustrations and tensions of planning and executing multinational operations in an unpredictable strategic environment requires a positive approach. This demands a collective attitude of mind that accepts the honest identification of problem areas and, more importantly, one that seeks timely and appropriate solutions. Unity of purpose, flexibility, coordination of effort, simplicity and determination to succeed are key principles in developing the operational effectiveness of a multinational force. The requirement to understand the nature of multinational operations, the advantages of conducting them and the challenges that need to be faced, are central to this approach.

0445. **Mutual Confidence**. General Eisenhower stated that mutual confidence is the one thing that makes an allied command work. This confidence stems from the following intangibles:

a. **Rapport**. Senior officers should strive to create rapport with each other. Personal relationships amongst commanders will influence all aspects of multinational cooperation.

b. **Respect**. Mutual respect for the professional ability, culture, history, religion, customs and values of participants will serve to strengthen relationships.

c. **Knowledge of Partners**. In multinational operations it is important to be as knowledgeable about friendly forces as about the enemy. Time taken to understand the doctrine, capabilities and aspirations of partners will pay dividends during multinational operations.

d. **Patience**. Effective cooperation may take time to develop. Differences of opinion and perspective will require patience to achieve a focused and unified approach.

Iraq War 2003: Personal Relationships

The US Army appointed Lieutenant General David McKiernan as the Coalition Force Land Component Commander (CFLCC) for the planning and execution of the 2003 invasion of Iraq. As a brigadier general, he had been DCOS Ops of HQ ARRC; as a result he understood the British Army and the British way, and had a number of important personal relationships with British officers. He knew both General Sir Michael Walker (CGS and then CDS) and General Sir Mike Jackson (CINC LAND and then CGS). He had also worked closely with Brigadier Albert Whitley as Chief Engineer, and previously ACOS Plans, in HQ ARRC. Major General Whitley was to become the senior British liaison officer to CFLCC during the war.

These personal relationships engendered high levels of confidence and mutual trust. Although frictions and misunderstandings exist in any coalition, in this case they were minimized. The trust placed in British officers by the CFLCC also permitted higher levels of British influence in the development and execution of the plan than might normally be expected.

Operations in Iraq: An Analysis From A Land Perspective (AC 71816)

0446. **Implications for UK Land Forces**. Unless in a UK-led operation, British land forces are likely to be incorporated into a multinational command structure or be under command of a land component commander from a lead nation. In either case, British land forces should maximize their interoperability with the component HQ and neighbouring land forces. Achieving this inter-operability with other nations' armies is as important as achieving interoperability with the UK's other services. The UK should also strive to maximize its influence within a coalition or allied force. It does this through gaining appointment to command and staff positions within the land component, commensurate with the level of commitment.

The Inter-Agency Dimension

0447. Strategic success can usually only be achieved through the close interaction of all instruments of national power: diplomatic, military, and economic. Those instruments should operate in concert at all levels of war. The non-military instruments are represented by other governmental and non-governmental agencies. The military role is frequently to create and maintain conditions required by those other agencies to achieve the political, social, and economic development necessary for lasting peace. Military activity can therefore often be regarded as a supporting effort even in periods of intense fighting.

0448. Whereas formal government machinery may exist at the strategic level for inter-agency interaction, at the operational and tactical levels inter-agency structures are usually less formal, relying more on mutual understanding and cooperation. Since at the tactical level it is the land component that deals most with other agencies on the ground, it is important that commanders at all levels within the land force have a sound understanding of the inter-agency process in general, and the part played by land forces within that campaign in particular.

Annex:

A. Command of the Land Component.

ANNEX A TO CHAPTER 4

COMMAND OF THE LAND COMPONENT

04A01. Chapter 4 encompasses the philosophy and principles of land forces operating in a joint campaign. This annex focuses on the command of a land component and national land contingent.

04A02. **Responsibilities of the Land Component Commander**. In exercising command and control over the forces assigned to him, a land component commander has a wide range of responsibilities, including:

a. Contributing to the campaign planning process and advising the operational commander on the employment of all land forces under his control.

b. Planning and coordinating tactical operations in support of the operational commander's intent and concept of operations.

c. Executing elements of the campaign plan and coordinating those operations with other component commanders.

d. Contributing to the joint coordination of the campaign, including lethal and non-lethal targeting and information operations.

e. Providing and maintaining communications and information services to subordinate formations.

f. Cooperating with the host nation and civil agencies, normally at local or regional levels.

04A03. **Component and Formation Command**. A land component headquarters may be based on an existing formation headquarters, but there are important differences between component and formation command. These are:

a. **Time and Space**. A component commander plans for the entire campaign, not for any specified period ahead of the current battle. He normally considers actions and effects required across the whole of the JOA.

b. **Level**. Component commanders and staffs contribute to operational level planning in close conjunction with the operational-level headquarters. However, component command is the highest level at which tactical activity is conducted, including joint tactical activity.[1] The JTF headquarters should not conduct detailed tactical synchronization between components. This is the responsibility of the supported component command.

c. **Resources**. Component commanders should be prepared and resourced to plan at all levels, in conjunction with other components. This includes subordinate tactical levels if this is the focus of a particular joint objective.

[1] Joint Air Attack Team operations, Air Manoeuvre and Joint Fires are examples of joint tactical activities.

d. **Staff Functions**. At the land component level there are specialist staff functions which may not be represented in a formation level headquarters. These include: political advice; campaign planning; targeting, information operations; media operations; civil-military relations; and coordinating the activities of national intelligence cells.

e. **Liaison Requirements**. There is significant requirement for liaison at component level: with other components; with subordinate formations or national contingents; and with civilian agencies and organizations. Most are required on a reciprocal basis.

04A04. **Organization**. A UK-led land component could be employed in a wide range of situations and scales of effort. The land component could be of battalion (or battle group), brigade, division or corps size. Every situation is likely to be different. It is important not to be prescriptive, but to retain flexibility and to consider each situation separately. The choice of land component commander and headquarters will require considerable judgement. The remainder of this Annex gives guidance as to what issues may be relevant to the command of a land component and design of its headquarters.

04A05. **Selection of Land Component Headquarters**. There may be circumstances in which a separate land component command headquarters is required above a tactical formation headquarters. There is inherent tension between the tactical responsibilities of a formation commander and the operational aspects of component command. This increases with the degree to which the commander has to focus simultaneously on tactical decision-making and supporting the development of the campaign plan. Any headquarters required to act as a land component headquarters should be structured and trained for the task. The key factors in the selection of the land component commander are the requirement for rank and authority to influence the operational employment of land forces, and the requirement to interact and liaise with the joint task force commander. In some circumstances the appointment of a deputy to the tactical formation commander, with responsibility for operational-level aspects of command, might be appropriate.

04A06. **Direction of Tactical Planning**. Experience from the 2003 Iraq War suggests that the way in which land formations received direction resulted in a lack of focus in tactical planning. This was due to the way in which the campaign plan was translated into orders and missions. Subsequent analysis suggests that:

a. The land component staff should contribute to the joint campaign plan, and report land force progress against it, in conjunction with Joint Force operations staff. It should not produce a campaign plan.

b. The land component commander should write a campaign *directive* for the whole campaign which describes, in largely narrative form, the anticipated course of events. It might expand on the JTFC's intent as applicable to the land component.

c. The land component staff should then write an order for the first major operation or phase of the campaign. That order extracts tasks from the campaign plan and translates them into missions for major subordinates. They issue that as the initiating operation order. They also issue a warning order for the next anticipated operation or phase and contingency plans for a few major or critical contingencies.

d. As the campaign progresses, the land component staff issue warning and executive orders in a timely manner. This process of directing subordinates' tactical planning should

give subordinates timely and sufficient direction for subsequent events. It should also prevent subordinate HQs from being inundated with excessive planning.

04A07. **Planning Timelines**. Since they are not required to plan for the whole campaign, subordinate staffs should concentrate on planning the next operation. As a guide, in war they should plan for the next few days. In operations with much lower tempo, such as COIN, this period may be weeks. It is not sensible to plan in detail beyond the next operation, since the situation will change during the intervening period in ways that are not generally predictable. Conversely the land component staff *should* plan further ahead, so as to contribute to campaign-level planning and predict logistic requirements.

04A08. **Deployment**. When forming a land component, the appointment of a commander should be considered as a priority. He should advise on force generation and preparation, and set priorities for land force deployment. He may also need to conduct theatre reconnaissance. He can also play a key role in assisting the deployment of the joint force and coalition-building in the land component. The land component headquarters may require additional communications and information services if it is physically separated from other headquarters in the joint force.

04A09. **Liaison and Staff Functions**. Elements of other components will operate in the land component's area of operations. International organizations, non-governmental organizations and other civilian agencies are also likely to be present in theatre. The land component's area of operations will inevitably encompass the sovereign territory of another nation, except where its area of operations is exclusively within the United Kingdom or its dependent territories. Consequently the land component commander may have an important role in liaising with host governments or agencies. He should not allow himself to become distracted from his primary function of commanding his force, and should not become the sole focus for liaison with national authorities and international organizations: this is an operational or strategic level function. The delineation of the land component command's area of operations is a critical factor in limiting the span of responsibility for that command. If an operational level joint force headquarters is not deployed into a theatre, many of its liaison and staff functions may have to be subsumed by the land component command. The headquarters concerned will need to be augmented in order to conduct a wider range of responsibilities and tasks. However, the larger a headquarters grows, the less mobile and survivable it becomes.

04A10. **Staff and Command Posts**. The requirements for staff and command posts will vary with every operation. However, a number of broad principles apply:

a. A land component commander should conduct an estimate of the requirement for staff and command posts as soon as he is warned for an operation. Contingency planning for a range of potential scenarios should generate a set of assumptions concerning the design of the headquarters, to assist that estimate.

b. Most of the staff functions within a land component command are largely independent of the scale and anticipated duration of an operation, although the staff numbers required to fulfil those functions may vary considerably. Such functions depend more on the nature of the operation than its scale.

c. Timely deployment of land component headquarters contributes to campaign success. Potential land component headquarters should be designed and structured for rapid deployment and staffs held at appropriately high readiness. Forward liaison and planning

teams should be typically held at the highest readiness, followed by elements of a forward headquarters.

d. Training as a land component headquarters is essential to achieving operational readiness. Integrated training programmes which incorporate joint force and other component headquarters are required. It is usually beyond the resources of a land component command to train itself: a land component commander can only be trained effectively when a superior headquarters is in place.

04A11. **The Command Estimate**. All commanders should consider how to command their operation as part of their plan and review that as the operation unfolds. At the tactical level this is usually the sensible application of standard procedures such as where to site command posts and when to move them. However, demands on the land component are more varied and normally greater. Once the land component or national land contingent commander is appointed he should conduct a command estimate, which should consider: input to operational-level issues; the requirement to interact with superiors and liaise with peers and subordinates; directing tactical planning; the requirement to move the command post; protection, CIS and life support.

04A12. **Inter-Component Liaison**. Coordination of tactical activities is not conducted by the joint force headquarters but between components. The supported component leads on such coordination and synchronization. Several measures are required to establish and sustain the close and detailed liaison required. Within a United Kingdom context, an Air Operations Coordination Centre (Land) will normally be attached from the air component to the land component headquarters. In turn an Army Battlefield Coordination Detachment will join the air component headquarters. RAF Air Liaison Officers are established in Army formation HQs, and Tactical Air Control Parties at lower levels. In turn, Army Ground Liaison Officers are attached to appropriate air force units.

04A13. **Responsibilities of the National Land Contingent Commander**. The principal role of a national land contingent commander is to integrate national land forces into a coalition contingent, enabling formation commanders to focus on their tactical missions. Specific tasks include:

a. The exercise of the national command of land forces, as directed by national authorities. The national chain of command may be direct to strategic authorities or through a national joint contingent commander.

b. Informing national strategic authorities of the current situation and future plans. Developments that affect national political objectives or require changes in ROE, the concept of operations, or commitment of additional national resources are particularly significant. The contingent commander should recommend any changes to national command arrangements within the multinational land component.

c. Influencing the planning and execution of a coalition operation in accordance with national objectives and direction. This is achieved through his personal relationship with the land component commander and staff engagement at lower levels. To assist this, the UK may seek positions within the land component command and staff hierarchy, commensurate with the size of its land contribution.

d. Conducting longer term national land force planning, to ensure integration into the land component plan and that national resources are in place when they are required. These include administrative and logistic support. This permits national tactical formations to focus on current and impending operations rather than the whole campaign.

e. Integrating the national land contingent into a coalition component, including: advising on the capabilities of national forces and any constraints on their employment; harmonizing national CIS with other contingents; and facilitating the integration of national intelligence architecture while ensuring the integrity of national security.

CHAPTER 5

THE SUSTAINMENT OF LAND OPERATIONS

Chapter 5 explores the implications of the context in which land operations are sustained. It then identifies how the principles of logistics and administration, and the functions of Combat Service Support are applied to sustain land operations.

OVERVIEW

5.1 Context

The more I see of war, the more I realize how it all depends on administration and transportation (what our American allies call logistics). It takes little skill or imagination to see where you would like your army to be and when. It takes much knowledge and hard work to know where you can place your forces and whether you can maintain them there. A real knowledge of supply and movement factors must be the basis of every leader's plan; only then can he know how and when to take risks with those factors, and battles are won only by taking risks.

Field Marshal Wavell, Speaking Generally, (London: Macmillan, 1946) pp 78-79

0501. Throughout history, successful commanders have recognized the importance of logistics and administration. The Duke of Wellington applied as much attention to sustainment as to the command of his army, writing that: "…without supply, I cannot continue operations in Spain…a starving Army is worse than none at all. Soldiers lose their discipline and their spirit..."[1] More recently General Smith, as GOC 1st (UK) Armoured Division during the 1991 Iraq War, stated "…*a commander can only fight the battle he can sustain…*", emphasizing that commanders should be fully aware of constraints imposed by sustainability.

The Operational Environment

0502. The operational environment described in Chapter 1 poses many challenges for sustainment. Expeditionary operations face a wide range of threats across the continuum of operations and in a potentially dispersed battlespace. Providing sustainment across the continuum of operations is challenging; for example, flexibility is required to sustain combat and humanitarian relief operations simultaneously. Dispersion may lead to unoccupied areas through which sustainment assets have to move, on lines of communication that are insecure. Combat may be required to enable such movement. Adversaries are likely to attack logistic and administrative elements in preference to combat forces, and their security should be planned from the outset. Better situational awareness may allow some threats to be avoided, but logistic assets should have mobility and protection comparable to the forces they support. They should also be trained and equipped for self-defence, thereby reducing the need for combat forces to protect them.

[1] Richard Holmes, *Wellington: The Iron Duke*, (London: Harper Collins, 2003) pp 135-141.

Joint, Inter-agency and Multinational Operations

0503. Chapter 4 showed that the Land Component is unlikely to work alone. Operations will almost certainly be joint and probably multinational, and coordination of sustainment assets across the force will be important. Rationalizing sustainment assets maximizes the availability of resources and optimizes sustainment operations. Common joint, inter-agency and multinational doctrine improves interoperability and increases operational effectiveness. The goal is joint, interagency and multinational synergy, where overall support is greater than that of individual elements in isolation. Joint logistics are explained in JWP 4-00 and multinational logistics in AJP-4.

5.2 Definitions

0504. ***Sustainability*** refers to the potential resilience and capacity of a force. It is the ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives. Insufficient sustainability will lead to a force over-reaching itself before achieving its objective. ***Sustainment*** is the actual process of maintaining a force during an operation. Sustainment is the combination of logistics, administration, resources and organization to deliver sustainability.

0505. ***Logistics*** is the science of planning and carrying out the movement and maintenance of forces. In its fullest sense, logistics comprise those aspects of military operations that deal with the development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of materiel, transport of personnel, acquisition or construction, maintenance and operation of facilities and services and medical and health support.

0506. ***Administration*** is the management and execution of all military matters not included in tactics and strategy, primarily in the fields of logistics and personnel management. It also refers to the internal management of units. It includes: staff and personnel support; medical support; welfare support; the provision of legal advice; chaplaincy and pastoral care; and provost support including military police and investigative support. Staff and personnel support includes the maintenance of casualty and reinforcement plans, the management of pay and documentation, and routine staff management. Preventative medical support and force preparation are administrative functions, whereas medical support to deployed units and formations is a logistic function.

0507. ***Combat Service Support (CSS)*** is the usual term for sustaining land operations, and defined as the support provided to combat forces, primarily in the fields of administration and logistics'.

5.3 Principles

0508. The six principles of logistics are ***Foresight***, ***Economy***, ***Simplicity***, ***Cooperation***, ***Flexibility*** and ***Robustness***. They are equally applicable to administration. These principles should be considered in combination with the Principles of War when considering sustainment. They should be applied using agreed planning yardsticks, contained in logistic publications[2] or formation SOPs. The principles of logistics provide a check list against which commanders can judge logistic plans.

0509. **Foresight**. The objective of the logistic staff is to ensure that the execution of an operation is not avoidably delayed or limited by a lack of resources. Sustainment planning should be

[2] For example, AFM Vol 1 Pt 6 *Combat Service Support.*

an early priority. Sustainment plans should be developed concurrently with operational plans in order to forecast likely requirements for personnel, materiel, services and equipment. They should also confirm that the operational plan is viable. Foresight becomes more important as stock redundancy reduces.

0510. **Economy**. The logistic principle of economy minimizes support effort in one area so as to maximize sustainability in another. This achieves concentration of sustainment effort, to support the concentration of combat force for the decisive act. Thus the principle of economy seeks to maximize sustainment using as few resources as necessary, as *effectively* and as *efficiently* as possible.

0511. **Simplicity**. The complexity of sustainment operations demands a simple plan that can survive friction and the uncertainty of a complex and dynamic environment. Simplicity enables plans, systems and organizations to react better to the unforeseen. It also enhances understanding, eases implementation, and develops trust and confidence in sustainment capabilities.

0512. **Cooperation**. Cooperation seeks to share logistic responsibilities or resources to optimize capability. It seeks to ensure that the logistic elements within a force interact to best effect. It also enables joint, inter-agency, multinational, host nation and contractor support to supplement land component sustainment. Such cooperation with non-governmental organizations and other government departments is often highly desirable, such as during humanitarian relief operations. Cooperation requires confidence in other organizations, which can be fostered by joint training, visits and liaison.

0513. **Flexibility**. Logistic flexibility allows a force to vary its tempo and change missions at short notice. It is derived from speed, capacity and mobility; and from the staff's ability to react as the operational situation changes. It is assisted by modular organizations that can be regrouped for specific operations and by the application of functional expertise across all aspects of CSS.

0514. **Robustness**. Since operations rarely develop as originally envisaged, sustainment should be robust to cater for losses, changes, and setbacks. The level of robustness should be assessed against risk, and a balance should be struck in both planning and execution between economy, flexibility and robustness.

Directed Logistics

Deployed force logistic processes have historically been characterized by large stocks held forward as insurance against uncertainty. These stocks provide redundancy to lessen operational risk. However, they are uneconomic, consume considerable strategic and operational lift to the detriment of combat forces, and are vulnerable to attack. Although satisfying traditional operational needs, traditional logistic processes face challenges in meeting the demands of expeditionary operations.

Expeditionary operations can be characterized by rapid deployment into dispersed and hostile areas of operations. The **directed logistics** concept seeks to meet this challenge by ensuring that resources can be delivered precisely and responsively when required. The aim is to reduce both the overall logistic footprint of the force and excess stock throughout the logistic chain. The effectiveness of directed logistics will largely depend on a joint logistic picture and logistic stock management systems. These should allow resources to be delivered only when and where they are required. The full benefits of directed logistics would require all equipment to be fitted with Health and Usage Monitoring Systems to allow demand to be accurately predicted. Reducing redundancy, increasing speed, and command at the appropriate level should permit resources to be directed where they are needed most. Directed logistics also seeks to ensure that the design and capability of equipment, processes and training all minimize sustainment requirements and increase self-sufficiency.

5.4 Functional Groupings

0515. There are five main functional groupings of CSS: ***Logistic Support, Medical Support, Equipment Support, Administrative Support*** and ***Infrastructure Engineering.***

Logistic Support

0516. Logistic Support links a deployed force to its sustaining base. It is the sustainment of forces through provision of materiel including acquisition, control and distribution; provision of movement of personnel and materiel; and provision of logistic support services.

0517. **Provision of Materiel**. Materiel encompasses all items provided by the supply chain. The provision of materiel includes the procurement, management and distribution of supplies from the strategic to the tactical levels. It is a major contributor to the physical component of Fighting Power through storage, maintenance, configuration and the distribution of stock to a force. Steady-state usage planning figures allow planners to predict materiel requirements with a high degree of confidence, except during major combat operations. It also allows the effective provision of those requirements by military or contracted means.

Port Operations – The Iraq War (2003)

Once the port of Umm Qasr had been secured in the early stages of Operation TELIC, Port Operators from 17 Port and Maritime Regiment RLC commenced the task of reopening the port to traffic. UK and US Navy divers started clearing the port of mines and explosives while port operators began to assess the port infrastructure. The port was a key asset for supporting continuing combat operations, considerably shortening the overland MSR from Kuwait, and allowing humanitarian aid to be delivered and the rebuilding process to begin. On 28 March 2003, RFA Sir Galahad steamed into Umm Qasr with the first shipment of aid for the region. The port operators provided an immediate military capability to reopen the port, but then undertook the recommissioning of much of the port infrastructure and trained local workers as stevedores and warehouse staff. The impact of returning the port to normal operation was seen as an essential step in building the trust and confidence of the local population and indicating the resolve of the Coalition to rebuild Iraq.

Figure 5.1 – RFA Sir Galahad

HQ 102 Log Bde Op TELIC Post Op Report (JF LogC 5001 dated 12 May 03)

0518. **Provision of Movement**. Deploying a force and managing the flow of personnel and equipment into a theatre is a joint activity, and is essential to expeditionary operations. Deployment can be by air, land and sea using military or commercial assets. All require close control. The land component can assist by providing movement control and port operating staffs to a joint movements organization. Transport is a generic term to describe the movement of personnel and materiel. General Transport provides container movement, palletized and loose freight, and personnel movement. It uses ships, aircraft, barges, rail or road vehicles. Specialist Transport provides the movement of casualties, bulk fuel, water, armoured vehicles requiring specialist lift, and chilled transport for rations.

0519. **Logistic Support Services**. Logistic Support Services are those activities not providing materiel or movement. They are wide-ranging, but focus on health, safety, sanitation and morale. Some may be contracted to civilian organizations when the situation permits. *Postal and Courier Services* provide a courier service for classified mail, a mail distribution service for official and personal letters, and a post office-equivalent counter service. *Ammunition Technical Support* maintains the availability, reliability and safety of ammunition. It provides personnel to manage, repair, modify and refurbish deployed stocks; to investigate ammunition incidents and accidents; and to deal with unexploded ordnance. The *Expeditionary Forces Institute (EFI)* provides welfare support to deployed personnel by providing recreational facilities and comfort items for sale. *Bath and Laundry* facilities assist preventative health support through personal and clothing cleanliness. *Catering Services* provide deployed catering and the quality control of rations, and assist the provision of locally supplied rations. *Pioneer and Labour* services provide a military workforce for general labouring tasks or local security and hire local labour to release military personnel from support tasks or to enhance the support provided. Other logistic support services include *Photography*, *Fire Services* and *Fuel and Lubricants Technical Support,* the last of which provides and controls the quality of fuel and lubricants, including any provided from local sources.

0520. **The Need for Specialists**. Logistic support functions are varied and complex. Many demand specialist operators who are not immediately capable of re-roling. A stevedore cannot assume the duties of a chef, nor can a railwayman be an air dispatcher without additional training. A small number of specialists can have considerable impact on the success of the operation. Examples include the use of railwaymen in Kosovo, port operators in Sierra Leone and labour support staff in Iraq.

Medical Support

0521. The principal task of the medical services on operations is to maintain the fighting strength of the force by preventing disease and tending to the sick and wounded.[3] Medical services identify hazards to health, such as those from indigenous diseases, and recommend measures to alleviate their effects. The preventable loss of soldiers is minimized by nutrition, shelter, clean water, clothing, sleep, immunization and health education. Injured and sick personnel are treated and evacuated according to their clinical needs. The quality of the care which they receive from the point at which they enter the medical chain improves the chances and speed of recovery. Medical assets should be distributed so that treatment timelines can be met for all personnel.[4] Medical support contributes to both physical and moral components of fighting power. It helps to maintain the morale of a force by reassuring personnel that they will be cared for if they become injured or ill.

[3] See JWP 4-03 *Joint Medical Doctrine*.

[4] Treatment philosophy is based on the 1,2 and 4 hour rule, which defines the critical timeline from point of wounding to receiving medical attention at Role 1, 2 and 3 facilities.

0522. **Role 1** medical sections (unit aid posts) are organic to combat units and provide skilled medical care from a doctor, nurse and combat medical technicians. **Role 2** medical support deals with the evacuation of casualties through critical care stations[5] between Role 1 and 3. Where evacuation time between Role 1 and 3 exceeds 2 hours, enhanced Role 2 support may be needed to provide forward surgery to sustain the most seriously wounded and increase the likelihood of reaching Role 3 alive.[6] **Role 3** (field hospital) support provides hospital care on deployed operations and seeks to achieve the highest practical standards of clinical care. Where possible, it is equivalent to that available in National Health Service hospitals. Medical services are responsible for transferring casualties between medical facilities as quickly, safely and comfortably as possible while maintaining in-transit care by appropriately skilled personnel. Such transit may be by vehicle, rotary-wing, or fixed-wing aircraft. Registered medical staffs are non-combatants and are protected under the provisions of the Geneva Convention.

0523. Medical support should be proportionate to the force as a whole and the nature of the operation. A balance should be struck between the clinical ideal and the operational situation, to produce a plan that is tactically feasible and has acceptable risk. While the medical mission seldom changes, the way it is achieved may vary considerably. Medical planning should always be aligned to the operational plan. This ensures that correctly configured, trained and equipped

Deploying Medical Facilities – The Iraq War (2003)

The deployment of 33 Field Hospital to Operation TELIC was delayed at Marchwood Military Port by Greenpeace protestors. In order to provide a Role 3 capability during the force generation phase of the operation, 22 Field Hospital was deployed by PJHQ. The Unit deployed to Kuwait by air to provide Role 3 support to an initial population at risk of 3,500. This subsequently increased to over 28,000. The hospital deployed via an Antonov aircraft which carried the 9 standard and 2 refrigerated ISO containers required to establish the airportable, 25-bed, Role 3 facility. Personnel arrived in theatre in three phases and were married up with the equipment at Camp KOYOTE. The Role 3 facility was open within 3 days of personnel arriving in theatre; ten days after being warned for deployment. The 25-bed facility treated a total of 600 patients and admitted over 240, with a peak in-patient capacity of 74. The Hospital redeployed after 30 days in theatre, once 33 Field Hospital arrived to relieve it.

Figure 5.2 – Field Hospital Ward, Iraq War 2003

34 Fd Hosp Op TELIC Post Op Report (G405 dated 20 Jun 03)

[5] Formerly 'Dressing Stations'.

[6] See AJP 4-10 *Allied Medical Support Doctrine*.

medical assets are in the right place and that critical treatment timelines are met. Capability, capacity, convenience and continuity should be balanced across the medical element of a force.

Equipment Support

0524. The principal task of equipment support is to maintain combat power by keeping equipment operational. This includes the procurement of equipment designed both for high reliability and maintainability and for easy user maintenance and repair. Equipment support focuses on maximising equipment availability through user care and the rapid return of repaired equipment. Equipment support within a deployed land force is termed 'battlefield maintenance' and is primarily delivered by REME craftsmen, although initial responsibility for serviceability of equipment lies with the user. Specialist maintenance is generally carried out by REME and other specialists. Equipment support staffs are responsible for the command of REME units, technical advice, equipment management, and direction on distributing technical spares including forward repair pools. They also provide advice as to how to preserve, restore and enhance the operational capability of equipment.

Figure 5.3 – Equipment Support, Iraq War 2003

0525. **Maintenance Support**. Battlefield maintenance is underpinned by three principles. *Forward Repair* seeks to ensure that equipment critical to an operation is repaired as close to the point of failure or damage as is tactically and technically feasible. More technically demanding maintenance requires *Stability* to devote the necessary time and resources for long-term sustainment of the force. *Echeloning Maintenance Support* describe the layering of equipment support on the battlefield. It consists of mobile, well-protected assets integral to combat elements, and less mobile and less well-protected but more technically capable assets located in more secure areas.

0526. **Maintenance Functions**. *Scheduled servicing* is conducted by equipment users, who are responsible for most routine and preventative maintenance. *Inspection and diagnosis* assesses the suitability of equipment for its task through routine inspection or diagnosis of failure. *Recovery* involves the extrication of abandoned, disabled or immobilized vehicles and, if necessary, their removal for subsequent repair. *Backloading* is movement of damaged equipment to a suitable place for repair. *Repair* is the technical operation to restore operational functions to equipments or repairable damaged parts. *Expedient repair*, including battle damage repair, is improvised repair to return damaged or disabled equipment to temporary service. *Reclamation* is the process by which materiel declared worn or scrap is restored to a condition which renders it fit for further use.[7] *Salvage* is a process in which fit sub-assemblies or components are removed from unrepairable equipment to supplement the supply system. *Cannibalization* is a process of

[7] AFM Vol 1 Pt 6 *Combat Service Support* Chapter 8 Glossary.

taking fit sub-assemblies or components from repairable equipment to respond to an urgent supply need. Cannibalization is a policy of last resort. Its implementation should be sanctioned by a command decision taken at high level. *Modification* enables equipment enhancements, either to rectify faults or improve operational effectiveness, either before deployment or in-theatre.

Administrative Support

0527. Administrative Support encompasses the activities required to manage and support a force effectively. While many administrative tasks are undertaken in barracks and on operations, several are specific to operations.

0528. **Personnel Support**. Deployed forces require routine administration on operations. Personnel support seeks to maintain the terms and conditions of service that underpin the moral component of Fighting Power and the Military Covenant. It includes pay, allowances and charges, documentation, and the reporting of personal occurrences. It can also include banking services for contract payments, local currency issue, financial regulatory advice, notification of casualties, and control and movement of individual reinforcements.

0529. **Staff Support**. Staff support maintains deployed headquarters processes by providing clerical staff and watchkeepers. *Specialist staff support* encompasses a wide range of tasks including: burial registration and the disposal of personal records and effects; recording prisoner of war custody details; education and training support; and civil affairs support. It also includes legal services, which ensure the application of the laws of armed conflict; provide guidance on rules of engagement and targeting; develop Status of Forces Agreements with host nations; and provide advice on disciplinary matters. Provost staff support includes investigation of crime and serious incidents; crime prevention; NBC warning and reporting; and the regulation of movement. Medical staffs undertake health care policy and planning; provide preventative and environmental health advice; and liaise with host nation and coalition medical services. Practical staff support includes the provision of working dogs, dog handlers and veterinary services.

0530. **Welfare Support**. The emotional and physical strains of combat can be mitigated by welfare support, provided by: *operational welfare packages* for telephone and internet access, reading and recreational materials; *chaplains* for spiritual ministry; and *EFI* which, while defined as a logistic support function, also provides welfare support.

0531. **G8 Support**. The Budget and Finance (G8) staff exercise financial management, including control and scrutiny of expenditure, for an operation. The oversight and award of local contracts, provision of advice on the legality of expenditure, and close cooperation with G1 and G4 staffs are essential activities to maintain financial probity. A balance should be struck between essential financial bureaucracy and meeting operational needs, so as not to impede operations.

0532. **G9 Support**. The principal function of G9 staff is civil and political affairs, of which civil-military cooperation (CIMIC) is a major part, particularly for sustainment operations. It provides a two-way exchange between a force and the host nation for contracting, humanitarian relief and reconstruction tasks. G9 staff should be included in the planning process, and resource requirements should be prioritized from the outset.

Infrastructure Engineering

0533. **Infrastructure**. Infrastructure is defined as all fixed and permanent installations, fabrica-

The Importance of Infrastructure – North West Europe (1944)

By the autumn of 1944 the Allied advance towards Germany was so successful that logistic support was showing increasing signs of inadequacy. At this time 12th Army Group's plan was to advance from Aachen to the Ruhr, with the longer term objective of Berlin. The subordinate 1st Army was tasked to cross the River Ruhr towards the Rhine. An area of the Aachen front, which had been temporarily taken from VII (US) Corps, was assigned by V (US) Corps to 28th (US) Infantry Division. Thus the stage was set for the Battle of Schmidt; a battle which exemplified the increasing stress of sustaining a rapid advance. One of the major constraints was that forward re-supply was confined to a single, narrow, steep sided route known as the Kall Trail. The battle situation did not permit forward repair but thrown tracks and other mechanical problems effectively halted movement along the Trail; repair on the route became almost impossible. The engineers failed to appreciate the importance of the Trail and did not allocate the necessary heavy equipment to its improvement (picks and shovels were used). Moreover, they were not afforded adequate protection. In sum, the condition and security of the Kall Trail greatly hindered replenishment of 28th Division's attack.

Major J W Wothe US Army, *Logistics and the Battle of Schmidt*
(US Army Command and General Staff College: Military Review, March 1980)

tions or facilities required for the support and control of military operations. It comprises temporary or existing accommodation, airfields, ports, railways, roads, bridges and other permanent or semi-permanent installations designed to operate for extended periods. It also includes associated fortifications, power, bulk fuel and water facilities. *Infrastructure Engineering* is the means of defining, supplying, operating, maintaining, dismantling and disposing of the operational infrastructure necessary to support a deployed force.

0534. **Operational Infrastructure**. Operational infrastructure comprises the structures, facilities and services needed in a Joint Operational Area for the direct support of a force. It has four components. *Theatre Entry Infrastructure* enables a force to get into theatre and includes air and sea points of disembarkation; deployed operating bases; Reception Staging, Onward Movement and Integration (RSOI) camps; logistic bases; and forward mounting bases. *Communications Infrastructure* includes roads, railways, and waterways. *Accommodation Infrastructure* includes expeditionary campaign infrastructure, ranging from service tentage to purpose-built hutted camps. *Utility Services* provide gas, electricity, water and fuel.

0535. **Military Works Area**. A Military Works Area provides a technical and management framework to deliver operational infrastructure when operational conditions allow the use of peacetime procedures. A designated military commander is usually responsible for all infrastructure engineering.

0536. **Engineer Processes**. Formal procedures are used to conduct infrastructure engineering. An infrastructure development plan sets the broad requirement which is then refined by engineer staff, usually in consultation with the user. Three engineer processes translate that plan into infrastructure:

a. **Design**. A military design authority (or consultant) will design the required infrastructure, unless combat engineering procedures are appropriate. The design will normally include a construction plan, method statements and a construction materiel list.

b. **Resource**. Infrastructure works generally require large quantities of materiel. Some may be provided through the supply chain, but much construction materiel (such as timber,

bricks and concrete) can often be purchased or manufactured locally. Where there is no local supply, or it does not meet safety or construction standards, out-of-theatre sources may be used.

c. **Construct**. Once materials are available, a construction force can undertake the work. This could either be: a military construction force, used when work is urgent or the threat is high; locally employed civilians; or a local or UK construction company under contract. Where works are contracted out, the contractor is likely to carry out all three functions of design, resource and construct.

0537. **Host Nation Infrastructure**. A force may use national infrastructure within a theatre or a third country, if used as a mounting base. This reduces the infrastructure engineering requirement but may deprive the local population of facilities.

5.5 Sustainment of Operations

Sustainment Planning

0538. Sustainment planning should be versatile, support the mission, be integrated into operational planning, and be conducted jointly and multi-nationally where appropriate. The integration of strategic, operational and tactical effort to support a mission may require the commander to influence administrative and logistic functions outside his own organization.

0539. **Factors**. Operational planning requires consideration of the principles of logistics and factors specific to the theatre or operation being conducted. Many sustainment operations, such as marrying-up materiel to distribution assets, have long lead times. An understanding of four main factors assists the prediction of the sustainment requirement. These are known as the **4Ds** and apply to both troops and materiel:

a. **Destination**. The destination defines the environment of the operation. It determines the pattern of wear on equipment and the physiological demands on troops, which allow preventative planning. The destination of resources and the distances involved define the strategic line of communication (LOC), the design of the regeneration system, and the resources, timing, speed of deployment, reaction, and execution of subsequent plans.

b. **Distance**. The length of both strategic and intra-theatre LOCs, including length, capacity and topography, determines the size, shape, structure and balance of resources required. It also determines the design of the resupply and evacuation systems required for casualty management and equipment repair.

c. **Demand**. Demand is influenced by the consumption or usage of men and materiel, and its pattern, rate of change and variability. It stems from the commander's intent and type of operation, and is the sum of three elements, shown graphically in Figure 5.4. Steady state demand represents daily sustainment needs that have little variation, such as predictable non-battle injuries or the consumption of rations. Cyclical demand represents additional needs to the steady state caused, for example, by training or seasonal conditions. Surge demand is driven by operations. It is the least easy to predict and the most susceptible to variation, for example in response to enemy action. Surge usually places the highest demand on a support organization. It requires responsive command systems, reserve stocks, and a delivery capability able to switch between priorities.

d. **Duration**. The duration of the operation and the rate of demand determine the quantity of men and materiel required. In Figure 5.4, the overall volume of materiel required is represented by the coloured areas. Mathematically, volume = rate (or *Demand*) x time (or *Duration*). The duration of an operation dictates endurance requirements and the need to rotate or replace equipment and men. A commander should balance the risk of a rapid, lightly supported operation against that of a better resourced, more deliberate operation that takes longer to mount.

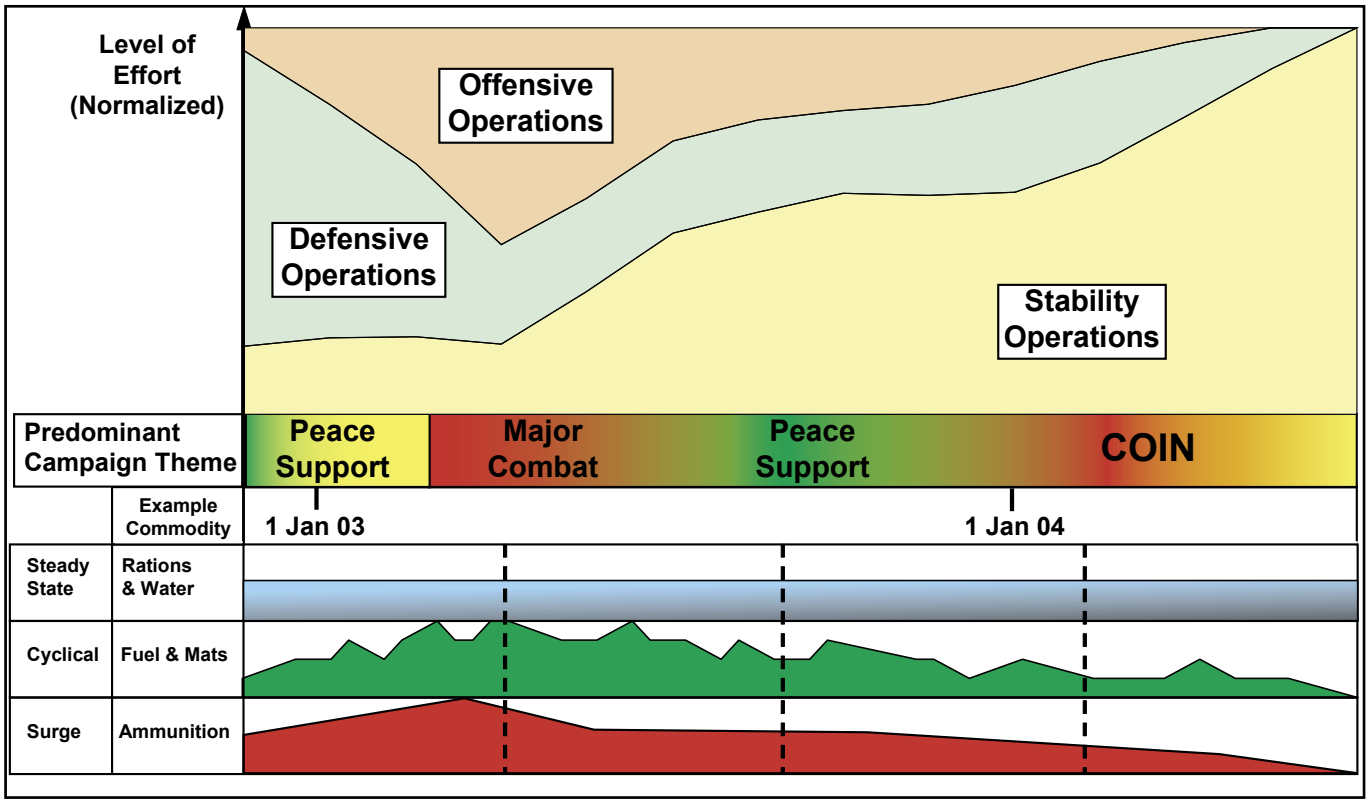

Figure 5.4 – Demand Patterns across the Continuum of Operations: an illustrative example

0540. **Sustainment Reach**. Sustainment reach defines the limit at which a force can assure sustainment. Beyond it, a force may culminate due to inadequate sustainment. Reach is affected by available stocks, movement assets, and the 4Ds: *Destination* by terrain, obstacles, and climate; *Distance* by the resupply loop; *Demand* by the type of operation; and *Duration* by stock consumption. Reach starts in the sustaining base and ends where the item is used. General Patton's Third Army, advancing across France in September 1944, was unsuccessful during the early stages of the Lorraine Campaign because his speed of pursuit made him exceed his sustainment reach. Stocks were available in theatre, but Patton was unable to achieve logistic concentration of force because he could not get stocks to his forward units.

0541. **Risk**. Risk should be taken to concentrate combat power at the critical point. A force cannot be strong everywhere and the identification of a main effort for combat, combat support and CSS allows concentration of force. Two aspects of sustainment risk should generally be considered:

a. The level of support to achieve the aim, maintain freedom of action and be able to react to the unforeseen should be balanced against risk, which is largely quantifiable. Sustainment planning should assess where risk may be taken so as to achieve agility and enhance freedom of manoeuvre. This is done by expressing sustainment reach in terms of options available to the commander, with resulting constraints or freedoms of action. Pessimism or over-insurance should be avoided. Risks taken in the short term may have unforeseen and undesired long-term effects, and changes to support can have cumulative impact on risk.

b. Reduction in the volume of sustainment stocks increases the vulnerability of sustainment operations to friction and enemy action. Sustainment assets have an easily identifiable signature and they operate along obvious LOCs from obvious sustainment areas. They should be reduced or protected against detection and attack. They can be protected by enhancing their integral defence capability; integrating them into a scheme of manoeuvre; or by allocating combat forces to their defence.

0542. **Sources of Support**. There are generally five sources of support available for deployed operations. Each may use commercial support through contracted logistics or civilian contractors deployed on operations. The primary source is military-controlled assets organic to a deployed force or made available from supporting organizations such as the Defence Logistics Organisation and Army Personnel Centre. National industrial facilities, host nation support including in-country resources, coalition assets, and resources contracted internationally are also available.

0543. **Balancing Support**. A balance of support from all sources is likely; military resources may be augmented by increased levels of multinational, host nation and in-country support. The balance of resources available is crucial to sustaining combat power. Commanders and staff should not adhere to any prescribed ratios of CSS to combat forces; the objectives of an operation and the requirements of efficiency, effectiveness, robustness and acceptable risk should determine the balance and sources of support. Some operations to support another nation's combat forces or provide humanitarian aid may be purely administrative or logistic, such as during Operation GABRIEL in Rwanda in 1995.

0544. **The Commander's Role**. Before operations commence a commander should ensure that he is able to deploy, sustain and regenerate his force. He should consider the sustainment implications of casualties, consumption and materiel losses; and then plan, allocate and balance resources to achieve the objective. A commander should also evaluate the risk of enemy action and the security of his sustainment assets, lines of communications and communication assets; and adapt his plans to reduce the effect of resource constraints.

0545. **Logistic Estimate**. A logistic estimate considers both the logistic and the administrative requirements needed to support an operational plan. It is an iterative and consultative process undertaken concurrently and in collaboration with the operational estimate.[8] It should be completed in sufficient time for an operational commander to assess whether he has to alter his plan and to allow the completion of preparatory activity. At each level the estimate can be refined, implications assessed and detail added. Logistic preparation of the battlefield identifies possible local or regional sources of support, and highlights shortfalls of support that should be addressed in the logistic estimate. A logistic estimate should also consider the affiliation of supporting to supported units and formations, by phase of operation, to ensure that support is directed where needed.

[8] Details are at AFM Vol 1 Pt 6 *Combat Service Support*, Sect 2, CSS Planning.

The three products of the logistic estimate are administrative and logistic *affiliations and control measures*; a *concept of operations;* and a *sustainability statement*.

0546. **Sustainability Statement**. The more accurately demand can be quantified, the more economically and efficiently a sustainment system can be designed. An estimate is by definition inexact. Anticipated demand derived from a logistic estimate should therefore be predicted by iterative analysis to produce a progressively more accurate estimate from which a sustainability statement can be developed.[9] Accurate analysis during the estimate and planning stages improves the assumptions underlying the sustainability statement. Sustainability statements are issued at strategic and operational levels in consultation with tactical commanders. For enduring operations, the sustainability statement should be reviewed periodically to ensure that it remains relevant to the operational circumstances. A sustainability statement fulfills two purposes:

a. **It is the commander's direction to planners and resource providers on what needs to be delivered**. It may be modified as a campaign progresses. Individual operations or phases within a campaign may need their own statements. Long lead-times are often involved in the manufacture of materiel; these should be anticipated at the strategic level to retain operational flexibility.

b. **It defines the level of resources made available to a campaign** which allows risks to be identified. It is important to spend time on analysis and prediction early in a campaign. The sustainability statement should be integrated into the operational planning process.

A commander need not know how to construct a sustainability statement but should be aware of the process and factors involved. It normally includes: the expected duration of an operation; the essential equipment and availability requirements; the level of self-sustainment required; the predicted casualty rate for men and equipment; the anticipated battlefield day; and information on the climate, environment, topography and human factors that influence logistic requirements.

Sustaining Operations

0547. The sustainment of operations can be considered at four distinct levels: ***strategic; operational; tactical*** and ***individual***. Each harnesses some or all of the functions of CSS, applies the principles of logistics and seeks to exploit the synergistic effect of these in delivering sustainment.

0548. **Strategic Sustainment**. Strategic sustainment links the national industrial base to a deployed force by providing resources necessary to prosecute operations. It seeks to generate forces at appropriate readiness for operations and focuses on obtaining materiel, building stocks, and ensuring strategic mobility. It also assesses the balance between civilian and military assets, the structure of the national defence industrial base and the lead times required to obtain materiel. It is conducted primarily by the MoD, single-Service staffs and PJHQ. It is primarily delivered through a combination of industrial capacity and the Defence Logistics Organisation. It is influenced by many factors, including cost, but the drive for efficiency in peace should be balanced by the need for effectiveness on operations.

[9] See JWP 4-00, *Logistics for Joint Operations, (2nd Edition)*, Ch 6 Annex C, 'Illustrative Sustainability Statement'.

0549. **Operational Sustainment**.[10] Operational sustainment aims to create and maintain an operational environment in a theatre to give a force freedom of action: it is an essential part of campaign planning. It includes:

a. **Pre-Deployment**. Pre-deployment activities include defining requirements for LOCs, developing a sustainability statement, preparing a force administratively and medically, and determining theatre and logistic command structures. The identification, acquisition and integration of Urgent Operational Requirements should be undertaken as early as possible. Logistic preparation of the battlespace allows the assessment of potential deployment areas to contribute to the support of a force, including infrastructure such as ports of disembarkation, road, rail and inland waterways, materiel and resources. It will indicate the potential for using HNS to support the force. Stocks should be checked, configured and prepared for outloading, including those required for in-theatre training.

b. **Deployment**. Deployment establishes the LOC infrastructure. It includes mounting and strategic deployment and RSOI. Enabling capabilities such as movement staffs should be among the first into theatre. Stocks can be outloaded by air, sea or land to sustain the force and provide a reserve optimized for the environment and type of operation. RSOI is normally a joint function whose coordination requires the expertise of a properly-resourced joint tactical-level staff for any but the smallest operations. It is normally provided by a joint force logistic component. The land component commander is responsible for ensuring that the reception, training, preparation and integration of his units is conducted effectively.

c. **Infrastructure and Facilities**. Infrastructure and facilities are created to sustain a force in theatre. Their purpose is to marry up incoming units and formations with their equipment, carry out modifications to equipment, and deploy the force to its training, acclimatization or operational locations. Infrastructure and facilities can then be used to sustain the force during operations. Logistic expertise is required to coordinate port, maritime, movements, supply, local purchase, fuel handling, catering, water, sanitation and engineering and construction tasks.

d. **Legal and Finance**. Legal tasks include establishing the legal authority to enter a theatre of operations; defining the status of deployed forces, including the provision of memoranda of understanding between the nations involved; establishing Rules of Engagement; and ensuring the legality of orders. Finance tasks include the provision of civil secretariat assistance to funding and accounting.

e. **Supporting the Operation**. Supporting the operation links sources of supply with tactical sustainment to ensure the supply and distribution of materiel. Additional assistance, such as support during the redeployment of formations or support to post-conflict activities, may also be required.

f. **Rehabilitation and Reconstitution**. Rehabilitation, including the refurbishment of equipment and the reconstitution of units and formations, may be required during and after combat. It is likely that resources for rehabilitation will be controlled at the operational level. Although appropriate stocks should be available, they might not be in theatre and may need to be moved from either a sustaining base or an intermediate location.

[10] See JWP 4-00, Chapter 7.

g. **Security of Sustainment Operations**. Enemy interruption of operational sustainment can be expected and may have a critical impact on the outcome of a campaign. Dedicated combat forces may be required to protect installations and lines of communications.

h. **Redeployment**. Redeployment from operations includes recovery into a point of embarkation, clean-up and refurbishment of equipment, repackaging of unused materiel, environmental clean-up, and movement back to a home base. An explicit theatre closure operation may be required at the end of a campaign, requiring additional logistic units.

0550. **Tactical Sustainment**. Tactical sustainment encompasses those actions required to supply and maintain the physical needs of tactical forces on operations. It meets the demands of the operation and sustains the physical component of Fighting Power. Such demands can be considerable, and resupply normally takes up most of the available transport. Tactical sustainment includes *arming the force* by the provision and replacement of weapon systems and ammunition to meet the required availability and expenditure rates; *fuelling the force* by providing fuel to meet routine and operational consumption rates; *supplying and distributing materiel* required by a force such as engineer stores, field equipment, spare parts, replacement engines and major assemblies; and the *recovery, repair and maintenance of equipment*, which involves the provision and establishment of systems and services to recover and repair failed and damaged equipment. When combined with operational sustainment, tactical sustainment provides the physical means to conduct operations and maintains the physical component of fighting power. Neither can be successful without the other. Nor can they operate without the individual sustainment required to maintain the moral component and hence the will to conduct operations.

Sustainment in the Western Desert (1941-42)

The War in the Western Desert from late 1940 until the end of 1942 was the sole area in which the UK's ground forces were continuously engaged in operations against the Italians and then their German allies. Logistics played a key part in the success or failure of operations on both sides. Neither side was self-sufficient in combat supplies: these had to be moved from respective home bases using such shipping routes as were available. This in itself provided logistic difficulties. For Britain, German submarines and aircraft attack prevented use of the short route through the Mediterranean; instead its shipping had to use the far longer route around the Cape of Good Hope. For the Germans, although they could use the short sea crossing between Italy/Sicily and the North African coast, they had a less well-developed and stocked base and were also vulnerable to attack by both sea and air.

The movement of supplies on land caused further problems. British experience was that as much as 30% of fuel was being lost due to leakage from inadequate containers, before the adoption of the 'jerrycan'. German experience showed that desert conditions affected vehicle life, even with ad hoc desert modifications, so that up to 35% of transport vehicles were unserviceable at any time, and 10% of available fuel was required to ferry the other 90% forward. All these factors impacted on operations. Commanders had to pay great attention to the ability of their logistic chain to build-up sufficient stocks and, more importantly, its capability to move such stocks to meet the needs of subsequent operations.

The British put great effort into solving logistic problems. Even before Montgomery's arrival, the railway in Egypt was steadily extended westwards; water pipelines were run as far forward as possible; and new concepts of forward stock holding were developed. The importance of logistics is reflected in the planned 3 day delay in the opening of the major British 'CRUSADER' offensive of the winter of 1941/1942 to allow completion of stockpiling and maintenance of armoured vehicles.

John Harding, Army Historical Branch: *Logistic Support in the Western Desert 1941-42*
(AC 71566 ADP Vol 3, *Logistics*, Annex A to Chapter 4)

0551. **Individual Sustainment**. Individual sustainment supports the moral component of Fighting Power by meeting the individual needs of the soldier and maintaining his will to fight. It covers all levels of command and provides for both individual and collective requirements. There are three primary areas of individual sustainment:

a. Meeting **individual needs**, both physiological and welfare. Physiological needs are met by the provision of food, water, shelter, clothing, hygiene and sanitation services. Welfare provision includes communication and information services, spiritual support and canteen and recreational facilities. *Administration* provides personal and financial administration, honours and awards, and the maintenance of discipline, law and order. It is a key element of meeting individual needs, but also provides a system of field records to record, report, monitor and maintain personnel information. There may also be a requirement to provide humanitarian assistance to refugees.

b. The system for the **treatment and evacuation of casualties** consists of medical assistance from the point of wounding, through treatment and evacuation, to the home base. This includes provision of mortuary services for those killed. It also provides for the treatment of non-operational sick and wounded and preventive medicine. The Geneva Conventions oblige nations to provide suitable medical care for prisoners of war: their handling, guarding and care are requirements under international law. The resources to do so are often considerable and require forethought and planning.

c. **Manning** an operation requires the provision of sufficient trained manpower to meet the required order of battle. It includes an estimate of likely casualty rates and hence the demand for, and provision of, battle casualty replacements. Provision includes their reception, induction, training and preparation for operations. Manning also includes the provision of reinforcements required to bring units up to strength. They are produced through the Individual Reinforcement Plan, which is an integral element of the preparation for deployment. Certain posts are unmanned during peacetime and the call-up of reserves may be required. In-theatre reinforcements can be provided as individuals or formed units. All reinforcements and replacements require equipping, training, orientation briefing and deployment; all of which demand organization and resources from within the support area.

0552. The four sub-sets of sustainment are not discrete activities but depend on each other for success. Individual sustainment is of little value unless the means for conducting operations is provided by tactical sustainment. Equally the means for tactical sustainment must be deployed, sustained and re-deployed by operational sustainment, enabled in turn by strategic sustainment. All four interact with each other to provide the overall sustainability of the force. The vignette opposite describes sustainment in the 2003 Iraq War, providing an example of an expeditionary operation and the sustainment issues that arose.

0553. **Command and Control**. Command is the unifying function that enables sustainability. Control is likely to be retained centrally to make efficient use of scarce sustainment resources. An operational commander identifies his priorities for sustainability during planning and these are incorporated into the sustainability statement. Individual and tactical sustainment are of particular interest to tactical commanders but they should also be aware of the level of operational sustainment available to their units and formations. Equally, the operational commander should quantify the likely demand for individual and tactical sustainment so that he can meet it through operational sustainment.

Sustaining Operation TELIC

In terms of Logistics, Op TELIC was quite a challenge, not least because until 6 Jan 03 we were focused on a quite different operation to be conducted on a line of communication through Turkey. The first task for the JFLogC was to design and populate a HQ structure. Experience from Ex SAIF SAREEA (Oman) and Op VERITAS (Afghanistan) allowed us to complete this quickly. Over 200 augmentees were eventually required to establish the HQ JFLogC around the nucleus of HQ 102 Log Bde.

Theatre entry was begun by a recce party into Kuwait on 8 Jan 03 and theatre preparation immediately followed. At this very early stage, we were heavily reliant on the US Forces and Host Nation Support (HNS) along with preliminary work conducted by 3 Cdo Bde. Once our own enabling forces were in theatre, Engineer, Pioneer and Contractor support were used to develop the theatre infrastructure, the majority of which was built in the harsh Kuwaiti desert. The main Land base of TAA RIPPER eventually housed 22,000 UK personnel. Concurrently, the RAF established 10 Deployed Operating Bases (DOBs) and the maritime assets of the Amphibious Task Group (ATG) provided invaluable early resources.

Because of the speed of deployment, some risks were taken with the RSOM planning process and we were heavily reliant on HNS and Coalition support throughout. Into Kuwait were brought nearly 32,000 personnel, over 16,000 vehicles (these would stretch over 130km if parked end to end) and more than 5,400 ISO containers. This took 78 ships and over 360 aircraft sorties. 197 Urgent Operational Requirements (UORs) were accepted and fielded and 6, 500 vehicles were re-painted. Not everything was elegant, but all the main aims were achieved, albeit only just, with the last armoured battlegroup of 7 Armoured Brigade being declared operationally ready 2 days before G Day. In concept, the RSOM process was simple, but its execution less so due to the complexity, speed and volume of personnel, equipment and materiel to be received.

In the area of Personnel Support, much work had to be achieved in order to develop the J1 support. A modified Operational Welfare Package (OWP) was delivered including access to phones and the establishment of BFBS radio and TV and a full mail service, including ‘e-blueys’. Catering support was delivered through contracts supplemented by military control and manpower; maintenance of catering standards was a particular challenge.

Support to the war-fighting phase effectively began on D Day (19 Mar 03) and lasted just over 4 weeks. Although demand did not exceed supply, strategic resupply by air was essential throughout. HQ 102 Log Bde deployed forward in direct support of the Land component. Medical services provided proved to be robust throughout and we were able to provide a better Role 3 capability than our allies, and indeed provided Role 3 support to them. During this period we were able to provide mutual support to US Forces; significant amounts of fuel were moved forward in support of 5 US Corps and 1 MEF during their advance North and we moved USAF assets to Talil airfield. In addition, HET support was provided to deploy US 4ID forward. The UK EPW holding facility was rapidly constructed and eventually became the Coalition facility.

Even before war-fighting had concluded, post conflict activities commenced. Humanitarian assistance in terms of water and food distribution points were established on demand. Projects such as the building of a freshwater pipeline from Kuwait to Umm Qasr was completed and the opening of Umm Qasr port was achieved within 5 days. This was followed quickly with the re-establishment of the Umm Qasr-Basra rail link. The re-commissioning of the Oil for Food Programme infrastructure was begun. Significant work was completed successfully on this and other utility services by the various STREs and other engineer assets. The dredging of the Port was also re-started. The JFLogC were allocated the town of Umm Qasr as an AO and 23 Pioneer Regiment re-established municipal governance, as well as law and order.

HQ 102 Log Bde Op TELIC Post Op Report (JFLogC 5001 dated 12 May 03)

0554. **Recuperation**. When the operation has been concluded, the force - personnel, equipment and unused stocks - is returned to the home base during redeployment and is usually recuperated for further deployment. Alternatively, the force may be recuperated for future operations in the current theatre. Recuperation is the process by which unused stocks are inspected and returned for storage, depleted stocks replenished, materiel and equipment returned to pre-operation standards and levels of availability, and personnel are rested, trained and prepared for future operations.[11] It is the final activity of an operation and is planned at the strategic level, since it is at that level that resources required to achieve recuperation can be directed and, in the case of concurrent operations, prioritized.

[11] See JWP 4.00, Chapter 8.

CHAPTER 6

THE COMMAND OF LAND FORCES

Chapter 6 describes the philosophy and principles of the command of land forces. It explains the nature of command in order to set the context of the British philosophy of command. It then describes the principles of Mission Command, explains the role of the commander and describes how command is exercised and supported. The formulation of concepts of operations and the qualities of commanders are considered in the Annexes.

OVERVIEW

6.1 The Nature of Command

The Environment

0601. Land forces, like the environment in which they operate, are complex. They typically comprise large numbers of fighting elements with multiple levels of command and there are often several headquarters at any one level.

0602. The command of land forces is characterized by the need for concerted action across a complex set of inter-related headquarters, many of which are physically distant from each other. This places considerable emphasis on unity of effort, mutual understanding and common intent across the force. The complexity of command varies with the size and organization of a force. The larger and more diverse the force, the more difficult it is to preserve its cohesion.

0603. On operations, a commander exercises command in conditions of uncertainty, risk, violence, fear and danger. Friction adds to the chaos and confusion of conflict. A commander cannot master all the conditions and events affecting his command since military activity does not take place in a vacuum. He should therefore not only accept that chaos and confusion are inevitable but seek instead to generate them in the minds of his opponents while minimizing them in his own. He should attempt to create just sufficient order to enable him to carry out his own operations. Success will depend largely on his experience, flexibility and determination.

0604. Command is linked inextricably to the strategic context and environmental conditions of a particular campaign. A military force is unlikely to succeed unless its commander understands the operating environment, in which he and his adversary play but a part. This environment is also affected by the local population, which may have ethnic, ideological, and religious factions. It is

also affected by other groups such as non-governmental organizations and agencies, the media, and by a range of external factors such as political and legal constraints.

Authority, Responsibility and Accountability

0605. Command is the authority vested in an individual for the direction, coordination, and control of military forces. It has a legal and constitutional status codified in Queen's Regulations[1] and is vested in a commander by a higher authority that gives him direction and assigns forces to him to accomplish that mission.

0606. The exercise of command includes the process by which a commander makes decisions and impresses his will on, and transmits his intentions to, his subordinates. It entails authority, responsibility and accountability. **Authority** involves the right and freedom to enforce obedience if necessary. Whilst a commander can devolve specific authority to subordinates to decide and to act within their own areas of delegated responsibility, he retains overall responsibility for his command. **Responsibility** is thus fundamental to command. **Accountability** involves a liability and obligation to answer to a superior for the proper use of delegated responsibility, authority and resources; it includes the duty to act. Thus he who delegates responsibility should grant sufficient authority to a subordinate to enable him to carry out his task; the subordinate, meanwhile, remains accountable to his superior for its execution.

Decision-Making, Leadership and Control

0607. Military command at all levels is the art of decision-making, motivating and directing forces into action to accomplish missions. It requires an understanding of the desired result; an appreciation of concepts, missions and priorities; and the allocation of resources. It also requires an ability to assess people and risks and involves a continual process of re-evaluating the situation. A commander is required to decide on a course of action, to lead his forces, and to control the execution of his mission. Thus the three constituents of command are **decision-making**, **leadership** and **control**, as illustrated in Figure 6.1. These three constituents overlap. Most major decisions will have implications for leadership and control while the demands of leadership may influence decisions and the way in which control is exercised. It may also affect the position of the commander and his staff.

0608. A commander's ability to harness decision-making, leadership and control is a major contributor to all three components of Fighting Power. If any of the three constituents of Command is lacking or deficient, it will have detrimental effect on the Fighting Power of a force as the whole. In particular, a commander's contribution to the conceptual component should conform to doctrine if it is not to be counter-productive. Common and authoritative doctrine maximizes cohesion, and thus Fighting Power, if applied intelligently and flexibly. Commanders who understand each other and share a common approach to the conduct of operations are more likely to cooperate successfully.

0609. The ***making of*** major ***decisions*** is a commander's key duty. Although he can be advised and provided with relevant information by his staff, responsibility and authority are his. Minor decisions should be delegated to the staff, consistent with their competence and authority. ***Lead-***

[1] Queen's Regulations (QRs) state that "The government and command of each of the fighting Services is vested in Her Majesty The Queen, who has charged the Secretary of State with general responsibility for the defence of the Realm and established a Defence Council having command and administration over Her Armed Forces" (J1.001); and in turn, Commanders in Chief who "in conjunction with their other duties are operationally responsible to the Defence Council for the command of all British Army personnel in their area" (J2.002).

ership is also a commander's duty although some aspects may be delegated. For example, the leadership of a headquarters staff falls to the chief of staff. **Control** is the continuing oversight, direction and coordination of assigned forces in accordance with the commander's intent.[2] To achieve this, he and his staff employ common doctrine for command, including standardized procedures for control. Control is thus a subordinate aspect of command and is largely the province of the staff.

0610. The terms **command** and **management** are closely related. In a British military context command has a legal and constitutional status and involves the ultimate responsibility for a military force or organization. The term management can be used to describe an equivalent function for a civilian organization. Both management and command contain elements of leadership, decision-making and control. Management is not the same as *management processes*, which are primarily about the allocation and control of human, material and financial resources. These are frequently used in military organizations to enhance the planning, organization and execution of operations, logistics, administration and procurement. Whilst military organizations are *commanded*, not managed, they make full use of management processes. For example, the British Army has a personnel management system which operates within the overall system of command. Management processes such as resource allocation, accounting, and budgetary control are critically important activities in many military organizations.

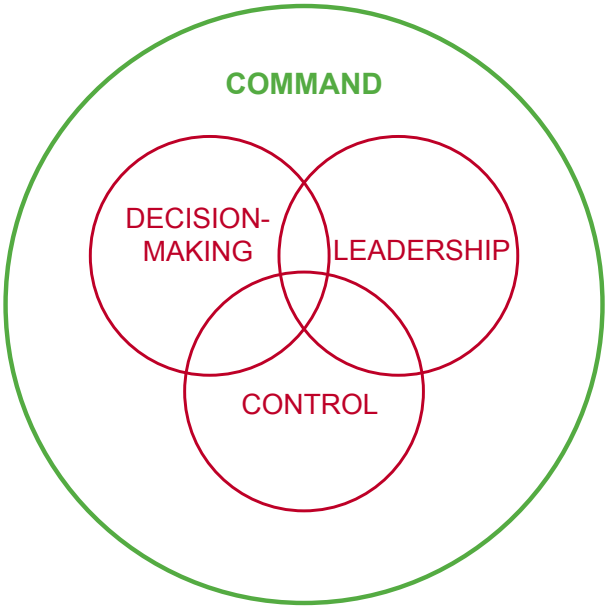

Figure 6.1 – The Command Model

0611. The remainder of this chapter is developed from the command model. It explains the philosophy Mission Command, the role of the commander, how he exercises command, and what support he requires in order to undertake this function.

6.2 Mission Command

Approach

0612. Mission Command is a philosophy of decentralised command intended for situations which are complex, dynamic and adversarial. It underpins the Manoeuvrist Approach and has four enduring tenets: timely decision-making; the importance of understanding a superior commander's intention; a clear responsibility on the part of subordinates to fulfil that intent; and determination on the part of the commander to see a plan through to a successful conclusion. The underlying requirement is the **fundamental responsibility to act,** or in certain circumstances to decide *not* to act, within the framework of the commander's intent. This approach requires a style of command which promotes decentralized command, freedom and speed of action, and initiative. Mission Command is a central pillar of Joint and Army doctrine. It has the following key elements:

[2] ATP 3.2.2, *Command and Control of Allied Land Forces*, Paragraph 103.

a. A commander gives his orders in a manner that ensures that his subordinates understand his intentions, their own missions, and the context of those missions.

b. Subordinates are told what effect they are to achieve and the reason why it needs to be achieved.

c. Subordinates are allocated sufficient resources to carry out their missions.

d. A commander uses a minimum of control measures so as not to unnecessarily constrain his subordinates' freedom of action.

e. Subordinates then decide for themselves how best to achieve their missions.

The commander's intent binds the activities of a dispersed force into a whole while maximizing his subordinates' authority to act. It is the principal output of decision-making and is further described in Annex A. Expressing and conveying intent is a commander's personal responsibility, as Field Marshal Slim noted:

> *"I have published under my name a good many operational orders and a good many directives… but there is one paragraph in the order that I have always written myself… the intention paragraph."*[3]

0613**.** **Principles**. Mission Command is designed to promote a robust system of command balancing **unity of effort** with **freedom of action** at all levels. It requires the development of **trust** and **mutual understanding** between commanders and subordinates throughout the chain of command. The exercise of command requires **timely and effective decision-making** based on initiative and creativity.

Unity of Effort

0614. Unity of effort in a fighting force stems from a number of inter-related means. These include: the commander's ability to formulate a clear intent and mission statements; the use of common doctrine, tactics, techniques and procedures; a common language of command; a high standard of collective training and teamwork; and the designation of a main effort. Taken together, these generate common understanding throughout a force. They also assist the coordination of actions in time and space on the battlefield and the ability to anticipate and respond swiftly to changes in the situation. Failure to achieve unity of effort will, at best, lead to confusion and missed opportunities. At worst, the result can be catastrophic. For example, much of the Eighth Army's inability to concentrate force effectively at the battle of Gazala in June 1942 was rooted in a lack of both unity of effort and a disciplined approach to command at all levels. As one noted historian observed:

> *"[The British] were plagued by feebleness, by lack of instant authority in the high command. Intentions were too often obscure. On the British side orders at army, corps or divisional level were too often treated as the basis for discussion, matters for visit, argument, expostulation even. The result was a system of command too conversational and chatty, rather than instant and incisive."*[4]

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[3] Lecture to the Staff College, 2 November 1967.

[4] General Sir David Fraser, *Knight's Cross* (London: Harper Collins, 1993) p. 332.

0615. A commander has a duty to enforce common doctrine in the execution of command. This ensures that the commander, his staff and subordinates work together efficiently to a common purpose. The employment of common doctrine should not lead to standard responses to every situation. Mission Command encourages initiative at all levels within a common framework of military thought. The use of common doctrine and language applies to principles, practices and procedures; all of which should be adopted flexibly on operations and training.

0616. Unity of effort is enhanced by subordinates understanding the intentions both of their immediate superiors and of those two levels up. This is described as vertical integration and allows subordinates to nest their own plans within those of their superiors. The concept of horizontal integration, which helps subordinates understand how their missions interact with others at their own level, is equally important. Horizontal and vertical integration are essential to understanding a formation's or a unit's contribution to the battle and hence the part it plays in fulfilling the superior commander's intent. They support decentralized decision-making in fluid operations and ensure that a concept of operations is coherent.

0617. In a politically-charged and volatile situation, it is important that soldiers understand both their task and the purpose behind it. Subordinates well versed in Mission Command should be able to work within constraints and thus avoid the pitfalls which await the unwary. Therefore directives and orders should express the commander's intent and concept of operations in such a way that everyone understands not just the aim but also the atmosphere which is to be created and the manner in which it is to be achieved; including the key constraints which the situation demands. This is particularly important in COIN or Peace Support, in which one ill-judged tactical action can have a disproportionate and undesirable operational or strategic effect.

Main Effort

0618. While Main Effort is not a principle of Mission Command, it is an essential concept that balances unity of effort and freedom of action. The Main Effort is a concentration of forces or means by which a commander seeks to bring about a decision. It is a mental tool to provide a focus for that activity which a commander considers crucial to the success of his mission. Unity of effort is enhanced through the selection and maintenance of the aim and concentration of force. Both are supported by designating a Main Effort.

0619. A Main Effort is given substance in three inter-related areas. The first is in the manner in which a force on the main effort is supported. This might require grouping extra combat power to the main effort and the allocation of priority for combat support and combat service support. The second area relates to the tasks and purposes given to commanders who are *not* on the main effort but have to support it directly or indirectly. This might include the employment of echelon forces and reserves and the sequencing of shaping, decisive and sustaining operations. The third area is the practical integration of main and supporting efforts into a concept of operations. This might require the narrowing of boundaries to concentrate force, requiring economy of effort elsewhere.

0620. Giving substance to a Main Effort is directly related to achieving a decision in tactical action. **The Main Effort should be expressed as a single action together with the principal force undertaking that activity**. A Main Effort described as 'the seizure of Objective GOLD by 4th Armoured Brigade' is more useful than 'the seizure of Objective GOLD' because it informs the force as a whole *as* to who should be supported. A land tactical commander should have only one Main Effort within the concept of operations for a given battle or engagement. It is mandatory for subordinates elsewhere to support the Main Effort, in order to ensure its success and hence the

fulfilment of the higher commander's intent. Commanders of combat, combat support, combat service support and command support elements should assume that they are to support the Main Effort unless specifically ordered otherwise.

0621. In combat, shifting the Main Effort is the principal means available to a commander to respond to a changing situation. By the simple articulation of a switch of Main Effort, subordinates should change the focus of their support without further detailed orders. This requires a thorough understanding of the concept of the Main Effort and particularly the duty of subordinates to support it in practical ways. The Main Effort *should* be shifted once the commander can identify a more effective manner of achieving his mission. The mission and the broad concept of operations remains the same but shifting the Main Effort to a subordinate on a subsidiary effort may allow him to exploit an unexpected opportunity.

Freedom of Action

0622. Commanders should not seek to over-coordinate the inherently complex and at times chaotic activity of war. They should accept that closely coordinated plans made in advance will probably not work as intended once combat is joined against a competent enemy. In particular, synchronization (the coordination of activities *at specified times*) is unlikely to succeed unless responsibility for its implementation is delegated to the lowest practical levels. It is critically important that coordination is conducted but it is often best for subordinates to cooperate between themselves.[5] Cooperation, not coordination, is a principle of war, and detailed coordination from above is contrary to the spirit of Mission Command. In general, coordination should be devolved to subordinates, who should coordinate between themselves.

0623. **Decentralization**. At the tactical level, freedom of action is largely achieved through decentralization of responsibility and authority. Freedom of action is the aim; decentralization is the principal means. Decentralization has marked the practice of many successful commanders in British military history. Field Marshal Slim noted of the Fourteenth Army:

> *"Commanders at all levels had to act more on their own; they were given greater latitude to work out their own plans to achieve what they knew was the Army Commander's intention. In time they developed to a marked degree a flexibility of mind and a firmness of decision that enabled them to act swiftly to take advantage of sudden information or changing circumstances without reference to their superiors. … [This] requires in the higher command a corresponding flexibility of mind, confidence in subordinates, and the power to make its intentions clear through the force."*[6]

Decentralization applies to all levels. It allows subordinates to use their initiative within their delegated freedom of action and provides them with a greater sense of involvement and commitment. Decision levels should be set as low as possible. This permits decisions to be made swiftly in the confusion and uncertainty of battle. It also reduces the need for any but essential information to be passed up and down the chain of command and ensures that decisions are taken by the commander with the most up-to-date information. **The more fluid the circumstances, the lower the decision level should be set.**

0624. **Delegation of Responsibility**. Decentralization of decision-making requires delegation

[5] The corps operation order for Guderian's crossing of the Meuse at Sedan did not even include the location of the crossing site or sites. That was a matter for subordinates to decide, advised by *their* engineer advisers. Having selected those sites, it was the duty of those subordinates to inform higher, lower and flanking headquarters.

[6] Field Marshal Sir William Slim, *Defeat Into Victory* (London: Cassell, 1956) pp. 541-2.

of responsibility in the exercise of command. It underlies much of the practical application of command, from creating the conditions for freedom of action for subordinate commanders on the battlefield to granting financial responsibility to designated budget holders in peacetime. Assessing which responsibilities to delegate is therefore an essential part of decision-making. Control, in the form of reporting performance and progress to a higher commander, remains an important component of command. The quality of a superior's decision-making depends upon honest and frank reporting from subordinates. The term reach-down refers to a state of affairs where, for whatever reason, a higher commander directs actions at a subordinate level two or more levels below him. Whilst there may be legitimate and exceptional occasions that demand jumping across echelons in this way, its repeated use will rapidly undermine confidence in the chain of command, not least at intermediate levels. Therefore any decision to direct two or more levels down should be very carefully considered by the senior commander involved. Any potential short-term gains involved will almost certainly be outweighed by a loss of morale, confidence, and cohesion in the force. This applies particularly within a joint or multinational force, where trust and mutual understanding across national contingents may be insufficiently robust to withstand such practices.

0625. **Allocation of Resources**. Resource allocation is the corollary of delegation of responsibility. A commander who delegates responsibility for action to a subordinate should furnish him with sufficient resources to carry out the action concerned. Such a tidy relationship between responsibility and resources is unlikely to survive in the complex and uncertain conditions of operations. In these circumstances, the allocation of resources is much more dependent on judgement and can never fully allow for the actions of the enemy. The requirement to allocate sufficient resources implies the responsibility to sustain the force in terms of men, equipment and materiel, and to prevent wastage. The demands of a force as a whole, or of a particular part of it, may require austerity elsewhere. This is consistent with the principles of war: economy of effort in one activity allows the concentration of force in another. Consequently, a commander should allocate priorities in almost any field of military activity and identify his Main Effort.

Trust

0626. Trust must be earned, not demanded. Personal trust can only be built up over time with experience, rather than by reputation. The spirit of Mission Command requires a presumption of trust between superior and subordinate, and between peers, that should develop through shared experience. In the first instance a commander should formulate and express his intent clearly and succinctly, delegate responsibility, and provide the necessary resources. He should then trust his subordinates to act as required. Likewise, a subordinate should trust that his superior has decided wisely, given effective direction, and that he will be supported when required. This bond of trust includes the tolerance of well-intentioned mistakes. If a subordinate cannot trust his superior to support him in such circumstances, the bond of trust will be eroded; the subordinate will not act on his own initiative; and the moral fabric of Mission Command will be destroyed.

0627. Trust is based on a number of qualities including professional competence, personal example and integrity. Once established and sustained, trust brings its own rewards for commanders and subordinates alike. It is a vital constituent of the maintenance of morale and so, ultimately, of victory. Soldiers should not only consider that they can trust their immediate superiors but should also have confidence in the ability of commanders right to the top of the chain of command. Field Marshal Montgomery, as Commander in Chief of the 21st Army Group in 1944-45, enjoyed the trust of his troops – and consequent loyalty and respect – throughout his command. It was based on his victory at El Alamein in October 1942 and subsequent successes in North Africa and in Italy. It was sustained in North West Europe despite the disappointment of Arnhem.

As Montgomery's biographer notes:

> *"Monty's appeal across the chasm between leader and those led rested in great measure on the trust he inspired: a trust that he had the ordinary soldier's well-being at heart, that he would not risk life unnecessarily but would wage war with a studied attention to casualties and the cost of victory."*[7]

For Mission Command to function effectively, a superior needs to have the trust of his subordinates and they of him. The basis of this two-way trust is respect and mutual understanding.

Mutual Understanding

0628. Like trust, mutual understanding requires time to establish. With experience, commanders should be in a position to understand the issues and concerns facing their subordinates. Professional knowledge and study will give subordinates, in turn, an insight into command at levels higher than their own. Thus a good commander ensures that he understands his subordinates and that they understand him. Only then can they together conduct operations in a cohesive and effective manner. Mutual understanding is also based on sharing a common perception of military problems. Here a common doctrine and philosophy of command bonds commanders and subordinates together by providing a unifying framework of understanding. This does not imply any requirement to come to identical solutions, since Mission Command stresses that an understanding of *what effect* has to be achieved is more important than concurrence over *how* it is to be achieved.

0629. A common approach to command assists mutual understanding and is a fundamental tool of Mission Command. It should be based on a professional understanding of doctrine, drills and procedures, including the language of command. Commanders' intentions must be quite clear to subordinates if they are to understand what they are to achieve. On operations there may be little time for questions or debate over the meanings of tactical terms or command expressions. One of the most infamous orders in British military history which resulted in the Light Brigade charging the wrong guns illustrates this point:

> Lord Raglan wishes the cavalry to advance rapidly to the front and try to prevent the enemy carrying away the guns. Troop of horse artillery may accompany. French cavalry is on your left. Immediate.

Thus for those who aspire to command or hold key operational staff jobs in the Army, there is no substitute for professional competence, including fluency in the language of command.

0630. Where shared experience and common doctrine do not exist, the commander should pay particular attention to the generation of mutual understanding between himself and his subordinates. Orders may have to become longer to allow more detailed descriptions of intent. The commander may consider visiting subordinates more often, and capable liaison officers who understand the commander's intentions will be particularly useful. Differences in language and culture tend to limit mutual understanding. Although individuals from other nations may speak English, it should not be assumed that their national or military cultures are identical.

[7] Nigel Hamilton, *Monty The Field Marshal 1944-1976* (London: Sceptre, 1987) p. 532.

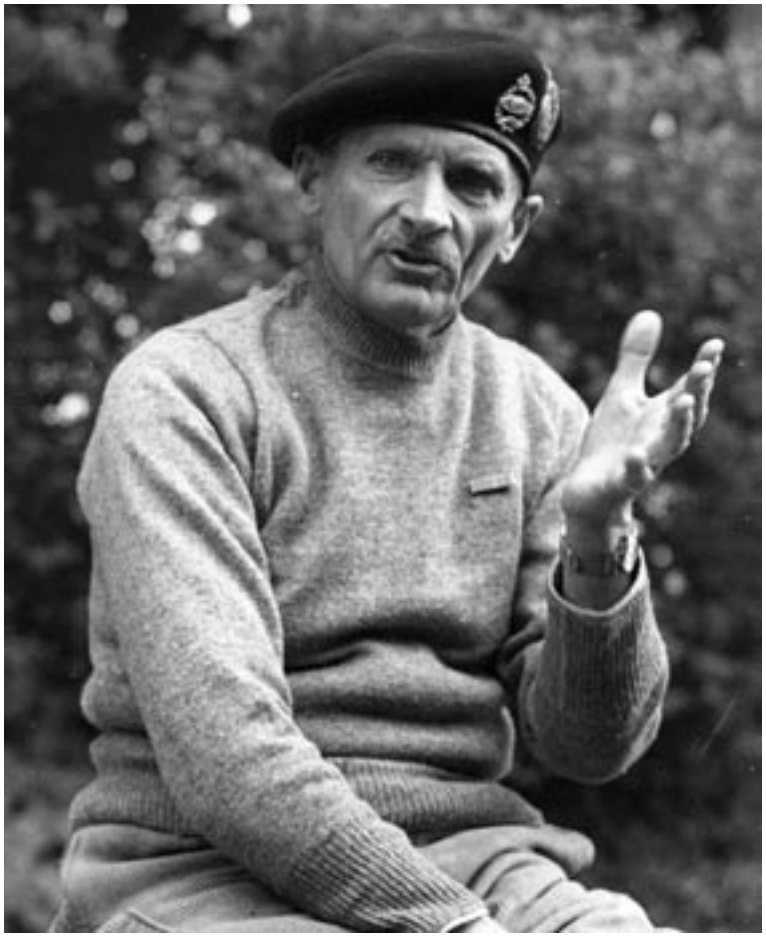

Figure 6.2 – The Ability to Inspire Trust: Field Marshal Montgomery

Timely and Effective Decision-Making

0631. Successful command requires timely and effective decisions at all levels. Much of the art of command depends on recognizing when to decide, which depends on good judgement and initiative. The British approach to operations requires that a commander should aim to reach a timely decision in relation to an opponent's decision-action process. This seeks to pre-empt him and to seize the initiative. The ability to know *if* a decision is required and, if it is, *when* it must be taken is critical. Only occasionally should a commander delay making a decision if he has insufficient information, or when he is waiting for others to decide.

0632. Fleeting opportunities should be grasped. Many tactical decisions will have to be made on the basis of incomplete information. **A commander who always waits for the latest available, or complete, information is unlikely to act decisively or in good time**. The ability to take difficult decisions, particularly when the outcome is uncertain, marks a strong commander. Those who are unsure of themselves may seek to have the decision referred up the chain of command or may turn to their advisers for help. As Major General Fuller observed:

> *"How many generals say to their staffs: "Give me all the facts and information and then leave me alone for half an hour, and I will give you my decision." In place they seek a decision from their staffs, and frequently the older they are the more they seek it, because they so often feel that the latest arrival from the Staff College must know more than they do – sometimes they are not wrong."*[8]

[8] Maj Gen J F C Fuller, *Generalship; Its Diseases and Their Cure A Study of the Personal Factor in Command.* (Harrisburg, PA: Military Service Publishing Co, 1936) pp. 65-66.

In contrast, authoritarian leaders who reserve even the most minor and trivial decisions for themselves invariably paralyse the entire chain of command, stifling all initiative beneath them. In this respect, Saddam Hussein did much to hasten the defeat of his army in both Gulf Wars. Principles of decision-making and planning are given in Section 6.4.

6.3 The Role of the Commander

Creating the Command Climate

0633. A commander has considerable influence on the morale, sense of direction and performance of his staff and subordinate commanders due to his authority, personality, leadership, command style and general behaviour. This applies both in training and on operations. Thus it is a commander's responsibility to create and maintain an effective climate within his command. Although Field Marshal Montgomery has been severely criticized for his autocratic manner and attitudes to certain individuals, he was clear enough on the requirement to create the right atmosphere:

> *"Inspiration and guidance must come from above and must permeate throughout the force. Once this is done there is never any difficulty, since all concerned will go ahead on the lines laid down; the whole force will thus acquire balance and cohesion, and the results on the day of battle will be very apparent."*[9]

0634. Successful Mission Command depends on a culture of command which encourages subordinate commanders at all levels to think independently and to take the initiative. Subordinates should also understand the rationale for their superiors' decisions. A wise commander will recognize this. He should explain his intentions to his subordinates in order to foster a sense of involvement in decision-making and to develop shared commitment.

Personal Qualities

0635. There is no unique formula for describing the right combination of qualities or attributes required of commanders. Clausewitz, for example, described two indispensable qualities of command: "*First, an intellect that, even in the darkest hour, retains some glimmerings of the inner light which leads to the truth; and second, the courage to follow this faint light wherever it may go*."[10] A successful commander requires a blend of mental, moral and physical qualities; those of intellect, character and temperament. Whatever the level, the foundation of command is ***leadership***, complemented by a number of other attributes such as ***professional knowledge***, under-pinned by ***integrity*** and example based on values and standards. In general, the higher the level of command, the wider the scope of qualities required and the emphasis on, and between, the required attributes changes. For example, those at higher levels are likely to require moral rather than physical ***courage***, and will have increasing demands placed on their intellect, creativity and initiative and their ability to develop subordinates. Organizational and management skills, including powers of communication, will complement judgement and self-confidence. These qualities are described in further detail at Annex B.

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[9] FM Montgomery, *High Command in War* (21st Army Group, June 1945) p. 21.

[10] Carl von Clausewitz, *On War*, p. 102.

Command Prior to Operations

0636. Prior to the commencement of operations, a commander directs, trains and prepares his command, and ensures that sufficient resources are made available. The training of subordinates is a key responsibility of all commanders in peacetime and a core function which, if neglected or under-resourced, will undermine the operational capability and fighting power of the Army. The training of future commanders should reflect the requirement under Mission Command to understand operations two levels of command up. In addition, all officers should be trained to assume command one level up. This requires that they should also be capable of thinking two levels up from that.[11]

0637**. Fostering an Understanding of War**. Professional development also includes evoking an interest in the conduct of war through the critical study of past campaigns and battles, in order to learn relevant lessons for the future. Commanders should whenever possible educate subordinates through battlefield tours, staff rides and study days. These stimulate professional interest, evoke an understanding of the realities of war and widen military perspectives. At the higher levels of command, a staff ride which is extended into a tactical exercise without troops represents a very good training investment for senior commanders and their staffs, and those of subordinate formations. Staff rides and battlefield tours are discussed further in Chapter 8.

Command on Operations

0638. A commander should lead his command to defeat the enemy quickly and at minimum cost to his own forces, while maintaining the morale and material well-being of his troops. This may occur within a context of fear and uncertainty on operations. The complexities of operations will rarely call for the measured unfolding of a carefully rehearsed plan. Command requires the determined application of doctrine guided by the principles of war. To be successful, a commander has to be capable, above all, of selecting and then *maintaining his aim* resolutely whilst displaying *flexibility* in his approach to achieving it.

0639. A commander's function varies with his level of command and of responsibility. At the higher levels, senior commanders exercise 'high command'[12] through subordinate commanders. At lower levels of command, more junior commanders are primarily involved in leading men directly in combat. Between these two levels, subordinate commanders translate the intentions of those in high command, and command their own formations and units. As a commander's rank increases, he has increasing responsibility for the organization, training and allocation of resources within his command.

0640. **High Command**. As described in Chapter 4, senior commanders are generally concerned with the planning and execution of campaigns and major joint and multinational operations to meet strategic objectives. A commander's competence at these levels will depend to a large extent on his application of operational art. This in turn rests on his ability to appreciate the environment in which operations are to take place; his knowledge and understanding of his opponent's capabilities and vulnerabilities; and his skill in recognizing the strengths and weakness of his own forces and those of his allies. It demands agility in force planning, the management of resources, and the application of technology to achieve operational goals. Senior commanders

[11] Richard Simpkin, *Race to the Swift* (London*:* Brassey's, 1985) p. 247.

[12] Whilst QRs Chapter 2, 'Command within the Army', distinguishes between 'Higher Command' (formation level and above) and 'Lower Command' (unit level and below), the more commonly accepted and long established term 'High Command' is retained in this publication.

Figure 6.3 – Battle Command: General Montgomery and his Formation Commanders, Alam Halfa, August 1942

need to know when to apply their knowledge and experience directly to a problem, without trying to perform their subordinates' jobs for them. Increasingly, proficiency in high command demands an understanding of and close cooperation with other Services, the forces of other nations, and the non-military agencies and organizations that are likely to be present in an operational theatre. It requires the ability to deal with those political, legal and media pressures which are normally associated with the strategic and operational levels of conflict, but which now have impact at the tactical level.

0641. **Battle Command**. When military force has to be applied, the achievement of strategic and operational goals largely depends on tactical success. Thus, at the tactical level, a commander is concerned with winning battles and engagements in accordance with the overall plan for the campaign or major operation concerned. Whilst luck or misfortune may have some part to play in the outcome of battle, a commander's tactical prowess stems normally from good leadership, based on the ability to motivate his command, and on professional competence. Successful command in battle demands a knowledge and understanding of enemy and friendly force tactics, slick command and staff procedures and, not least, personal determination and flexibility. A tactical commander's focus should lie in the skilful defeat of the enemy or of other adversaries through a good eye for ground, effective and timely decision-making and the coordination of combined arms and joint fires on the battlefield. The opportunities made available through digitized battlefield command systems should be exploited vigorously. In particular, a commander should use the freedom of movement he enjoys to position himself to maximum effect without losing his situational awareness.

0642. **Position of the Commander**. A commander should consider his position in relation to the forces he commands and his mission. His decision as to where to position himself can have important consequences for the conduct and outcome of operations. The basic factors influencing that decision are common to both the operational and tactical levels:

a. The ability to assess the situation, including the requirement to judge the condition and morale of his forces, and to impose his will on his command.

b. Access to other mission-critical information such as assessments of enemy forces.

c. Secure and reliable communications to his points of command.

d. Access to staff to support him in planning and decision-making. The continuity of forward or tactical command may be limited by the availability of supporting staff.

e. Security, including physical and electronic protection. In general terms, the greater the footprint of the headquarters, the greater the signature and associated vulnerability.

Network Enabled Battle Command

Networked Enabled Capabilities seek to change the ways in which forces are commanded. At the operational and tactical levels, Network Enabled Battle Command (NEBC) seeks to use enhanced communications, information technologies and ISTAR to support better decision-making, leadership and control. All levels of command should benefit from more informed decision-making, faster tempo, better synchronization of actions across boundaries, and less friction in execution. Yet, because command remains primarily a human activity, the effectiveness of command continues to depend as much on individual qualities as on technologies.

NEBC should allow commanders to gain better awareness of the current situation derived from automated reporting of own forces, comprehensive ISTAR, and the joint operations picture. Awareness of potential threats outside the area of intelligence responsibility allows timely action before the threat matures. Analysis of some information can be conducted in the rear or in the home base, reaching back to collaborate with subject matter experts. Consequently, commanders can be freed from much of the staff support that would otherwise previously have made it difficult for them to command forward, and to separate themselves from many of the control functions of a large and unwieldy headquarters.

Armed with appropriate timely information, higher headquarters may have better overall situational awareness than local commanders. If they can exercise control over fast-moving elements, better concentration of effort and synchronization of combat power should follow. Responsive battlespace management and the ability to broadcast changes of intent swiftly throughout the force are the keys to improving control. During fluid operations they should reduce the need for detailed planning, improve tempo and support exploitation of fleeting opportunities.

If applied intelligently, NEBC should not undermine the British Army's central philosophy of Mission Command, of which control is only one part. Any temporary centralization of control does not alter the authority, responsibility and accountability of personal command. The complexity of land operations, even with NEBC, would overwhelm any single person or headquarters that attempted to coordinate every aspect of an operation: Mission Command remains the most effective way of dealing with such complexity and allowing personal initiative. Those who place undue reliance on higher headquarters for information and guidance will rarely make decisions in a timely and purposeful manner. The influence of deception, enemy action, gaps in ISTAR coverage, and the inherent vulnerability of information and communication technologies mean that Mission Command has an enduring quality.

Thus the goal of NEBC is a flexible capability that is physically, electronically and mentally agile to create freedom of action for subordinates. It should enable a senior commander to support a subordinate better whilst only centralizing control if it is vital for the force as a whole. Developing such an agile command capability will demand high levels of training in conditions that are difficult to simulate but are nonetheless critical for the operational effectiveness of NEBC.

The most suitable position for the commander is that point where he can best lead his command by making timely decisions appropriate to his level of command. Digitized communications such as video-telephone conferencing should allow greater choice of location for the commander, but can constrain that choice. The enduring requirement to lead troops in combat will influence his decision, particularly at the tactical level. Conversely if a commander remains too close to the action, he risks becoming embroiled in a side-show that obscures his overall vision.

0643. **Pragmatism**. Since conflict is complex, unpredictable and evolutionary, much of lower level doctrine can at best only be a guide to the conduct of the first engagements of the next campaign or operation. Persisting with practices and procedures that do not work invites defeat. All commanders should examine critically what actually works on the battlefield and then do it: this is the essence of pragmatism. It calls for simple practices and procedures that are adaptable to the situation, and a methodology for transmitting new procedures across a force. Although *practices* and *procedures* may change, *philosophy* and *principles* should only be amended after mature reflection, away from the immediate pressures of combat.

Command after the Operation

0644. A commander's responsibilities to the Army as whole and to his command extend to recording the lessons of the operation, and contributing to the process by which those lessons are learned. In the past there has been a tendency for lessons to be collected but not acted on. It was not always so: during the Second World War the British Army regularly published extracts of combat lessons identified within a few weeks of the start of a campaign.[13] A commander's responsibility for the lessons of an operation cannot be considered closed until he is satisfied that the lessons of a recent operation have been identified and properly exploited. The initial means of identifying lessons is the post-operational report, augmented by the Commanders' Diary.[14] Subsequently, emerging lessons should be collated, analysed and prioritized for further action, and then disseminated by higher authority. A well-practised, all-informed and flexible lessons process adds considerably to the development of operational capability, particularly with regard to tactical doctrine and collective training.

Assessment of Subordinates

0645. Once appointed, a senior commander should study the personalities and characteristics of his subordinates. Some will be content with a general directive; others will prefer more detail. Those who cannot operate without detailed direction should not be considered suitable for command. Some subordinates will tire easily and require encouragement and moral support; others, perhaps uninspiring in peace, may flourish on operations. Matching talent to tasks is thus an important function of command. The commander should to continue to assess subordinates in peace and on operations so that the right commanders can be appointed. The assessment of individuals and their subsequent handling applies to staff as well as subordinate commanders. The recognition of subordinates' strengths and limits is essential to the effective exercise of command.

[13] *Current Reports from Overseas*, which made low level tactical observations was published on a weekly basis. As an example, there were 13 separate reports from the campaign in Sicily; the first appeared on 7 August 1943, just four weeks after the operation began; the last on 6 November 1943.

[14] The content and submission of the Commander's Diary is described in AFM Volume 1 Part 8, *Command and Staff Procedures*.

0646. Inevitably some commanders and members of the staff will fail and have to be removed, in their own interests and those of their commands. The chain of command should assist in this process, however unpleasant for those involved. Field Marshal Slim advised that an army commander should remove a divisional commander; in other words, removal should be done two levels down.[15] When treating failure at lower levels, however, there is often scope for giving officers and men a second chance. General Hackett observed: "An opportunity to re-establish himself in his own esteem, when he has forfeited it, is something for which a man will give you a great deal in return."[16] Successful commanders who have unexpectedly failed may simply be worn out. After rest and recuperation they can be returned to operations and allowed to prove themselves again. Senior commanders should decide whether they should be returned to their old commands or given new ones.

0647. One of the most important duties of a commander is to report on his subordinates and to identify candidates for command and staff appointments. To allow the objective assessment of subordinates' qualities of command, individuals should be placed in circumstances where they have to make decisions and live with the consequences. They should also know that their superiors have sufficient confidence in them to permit honest mistakes. Training should give an opportunity for judgements to be made on individual qualities. In particular, any assessment of subordinates should confirm whether they exhibit the necessary balance of professionalism, intellect and pragmatism required to carry the added breadth and weight of responsibilities that go with promotion.

6.4 The Exercise of Command

Promoting Common Understanding

0648. **Doctrine**. Common understanding is a product of sound and clear doctrine and the dissemination of battlefield information such as operational assessments. It is enhanced through rehearsal and effective training across a force. Common understanding is imparted through standardization of terminology, symbology and low-level procedures as much as in the less tangible issues such as the philosophy of command or the Manoeuvrist Approach. Explicit, written and widely taught doctrine is critical to achieving truly common understanding across a force.

0649. **Assessing the Situation**. It is the duty of a commander and his staff to assess the situation as they see it. They should disseminate that assessment to promote common understanding of the situation across the force and to inform superior commanders. The routine dissemination of such assessments allows differences of perception to be identified and resolved. The assessment should normally cover the enemy, progress in achieving the current mission, the actions of principal subordinates, and the listing of concerns. At times it may be necessary to give greater detail, such as the location and actions of subordinates two levels down. The accuracy, timeliness and degree of detail required will be key aspects of the assessment and there will often have to be a trade-off between those aspects.

0650. **Rehearsal**. Where possible, the understanding of a plan should be validated by rehearsal. Mission rehearsal can take one of three forms: back-brief, 'rock-drill' or physical rehearsal. A back-brief is designed to confirm subordinates' understanding of the plan. It usually represents the last chance to modify a plan before execution. Back-briefs should not be used as vehicles for commanders to impose the way they wish subordinates to conduct their assigned missions. That

[15] Field Marshal Slim, *Lecture to the Staff College* (2 November 1967).

[16] General Sir John Hackett, *The Profession of Arms* (London: Sidgwick and Jackson, 1983) p. 221.

merely undermines freedom of action and the development of trust. In contrast, a 'rock-drill' is aimed at synchronizing the details of a *given* plan and should not be used to amend a plan unless major problems are identified. Physical rehearsals may contain an element of training and may have a beneficial effect on the cohesion of the force.

Decision-Making

0651. In order to decide on a course of action, make a plan, and put it into operation, a commander requires timely and accurate intelligence, together with a control means and robust communications to bear that information and to pass his orders to his subordinates. The quality of a commander's decision-making and planning capability is also affected by a number of other influences, including individual differences and environmental factors. The relation of the decision-action cycle to information and communications is outlined in Figure 6.4. The need for timely, accurate and relevant information may demand information flows that do not necessarily follow the chain of command. A number of levels of command may require the same information at the same time, rather than sequentially. An air-raid warning is an example. The model has limitations. Although it suggests a sequential approach, once operations start the situation will usually develop into a continuum with orientation, observation, decision and action all happening concurrently. In addition, although there is clear advantage in deciding and acting faster than the enemy thereby pre-empting and forestalling him. It should be remembered that cycling the decision-action cycle is not an end in itself. The end sought is tactical success. Rapid and effective decision-making is but a part of seizing and maintaining the initiative.

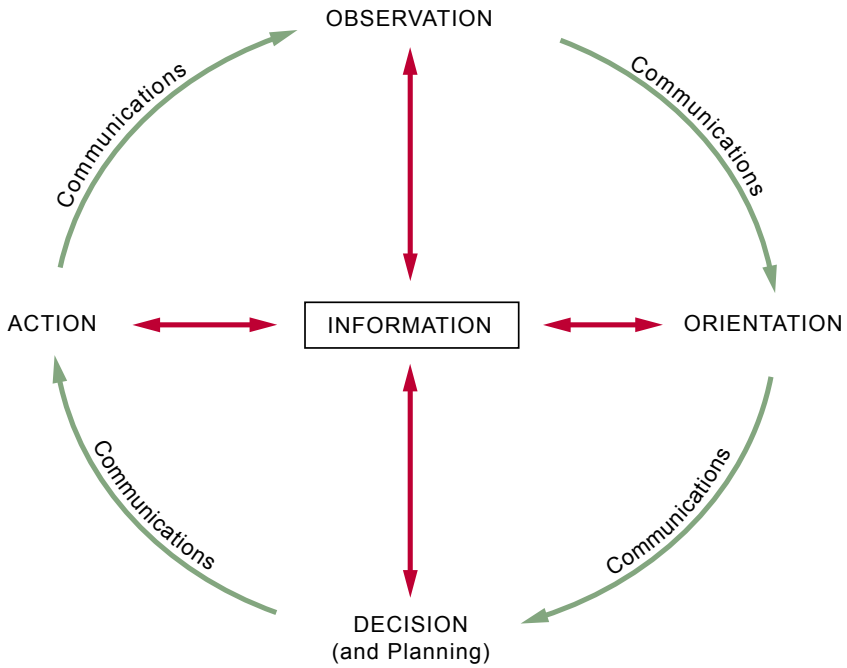

Figure 6.4 – The Decision-Action-Cycle

0652. **Principles of Decision-Making**. Decision-making is one of the principal constituents of command, and the way in which decisions are made has a direct effect on fighting power. The relationship between decision-making and operational effectiveness can be encapsulated in six principles of decision-making:

a. **Quality and timeliness of decision are critical to operational effectiveness.** There is considerable battlefield advantage to be gained in making sound decisions very quickly, rather than taking longer to make a decision that is subjectively better. More generally, the real quality of tactical decision-making stems from the speed in which it is undertaken, relative to the enemy.

b. **Commanders should make decisions personally and express these decisions clearly and succinctly.** This is a cornerstone of the British Army's command doctrine. As

decision-making is one of the three constituents of command, the taking of major decisions should not be delegated.

c. **Commanders make better and quicker decisions through training**. Such training should be based on frequency, breadth, feedback and reflection. Intuition stems from frequent opportunities to make decisions in training and on relevant feedback to improve their quality.

d. **It is the *outcome* of the decision-making process that is all-important.** Thus the focus should be on the quality and timing of the decision and the understanding of that decision by subordinates and staff, rather than on the method used to reach the decision. There is evidence that expert decision-makers adjust their decision-making methods in the light of experience; this should be encouraged.

e. **Staffs assist commanders to make decisions** through the provision of information and its subsequent assessment, analysis and arrangement.

f. **Commonly understood decision-making methods enable commanders and staffs to work together effectively,** in particular when headquarters are assembled at short notice. However, methods should not become ends in themselves since it is the outcome of decision-making that is important.

0653. **Intuition**. Intuition is largely subconscious: the decision-maker just 'knows what to do'. It does not excuse poor decision-making nor reduce the need to check that a course of action is feasible and appropriate. Nonetheless, **commanders should be encouraged to rely on their intuition.** In the right circumstances they tend to make as good or better decisions than when using formal decision-making methodologies and they tend to make them quicker. Intuition depends on using experience to recognize patterns which indicate the dynamics of a situation. As it is experience-based, commanders may have good intuition in circumstances with which they are broadly familiar. For example, an experienced platoon commander is likely to have conducted several platoon attacks in training and does not usually have to think deeply to produce a quick, workable plan. Conversely, a divisional commander is unlikely to have experienced a similar number of divisional operations: he may need to rely more on formal decision-making methodologies. The issue is not the complexity of the problem but its familiarity to the decision-maker. As John Masters reflected:

> *"The higher [the commander] stands the more he needs, too, another quality which cannot be taught by any quick means but is either there, by a stroke of genetic chance, or more usually, is deposited cell by cell on the subconscious during long years of study and practice. It is this quality which tells a commander, instantly and without cerebration, whether a plan is inherently sound or unsound. It is this that enables him to receive the advice of specialists and experts, and reach the proper decision though the specialists conflict; and, on other occasions, to overrule them even when they speak with one voice."*[17]

If a commander cannot decide intuitively, he should follow an explicit decision-making process based on rational analysis of the problem.

[17] John Masters, *The Road Past Mandalay* (London: Michael Joseph, 1961) pp. 207-208.

The Duty to Act

0654. At the tactical level a mission to a subordinate is a direct order. It should describe what he is to achieve and why, and be contained in orders which state the situation as perceived by the superior commander together with his intent, at the time the order was issued. The subordinate's duty to carry out the order extends to recognizing if the situation changes to the point where his mission is no longer appropriate. In such a case he should, in the first instance, report the situation to his superior with an intended course of action. If he is unable to report to his superior, he should exercise his initiative within the spirit of the superior's mission and intent. In short, a subordinate has a *duty to act* in variation to his given mission if he judges that the circumstances require it. However, he remains fully accountable to his superior both to explain his reasons and for the consequences of his actions.

0655. **Personal Initiative**. Commanders at all levels can seize and gain the initiative in combat through personal initiative. Taking the initiative is a duty: failing to display initiative is failing to do one's duty. Initiative in support of the commander's intent should be encouraged in subordinates. To foster initiative:

a. No apparent case of well-intentioned mistake should ever be censured.

b. Cases of apparent error should be considered by a superior from the subordinate's perspective. The results may be highly instructive to both parties.

c. Initiative should be rewarded from all ranks, especially at lower levels. Repressing initiative early on will make it more difficult to develop it later in a career.

d. The greatest censure should be reserved for inactivity in cases where action was clearly required.

Plans and Orders

0656. An operation order should include only such detail as is necessary for commanders of subordinate formations or units to act purposefully, to issue their own orders and to ensure coordination. Mission Command requires orders which concentrate on imparting an understanding of the context of the operation and what needs to be done rather than how it is to be achieved. Hence the importance of the higher commander's intent.

0657. Mission Command also requires a minimum of control measures to be imposed from above and included in operation orders. It has specific consequences for the length of operation orders and the manner in which the staff conduct control. At the beginning of a campaign or major operation, the initiating operation order may have to be highly detailed. Thereafter, operation orders that run to more than a few pages in total are inconsistent with Mission Command. **Short orders** are a key feature of Mission Command at the tactical level and **should be a key training objective**. Not only do long orders take time to prepare, they take time to transmit, read, interpret and analyse. They act as a brake on tempo and may constrain freedom of action. Guidance on the approach to the formulation of missions and concepts of operations, is given in Annex A.

6.5 Command Support

0658. Commanders of all but the smallest forces need support to exercise command effectively. This is provided by ***command support*** elements, which assist a commander in decision-making and control. They include the staff, arms advisers and liaison officers. They provide robust Information and Communication Services (ICS)[18]; create a working environment with protection, sustainment and mobility; and set standard procedures to integrate staff effort within and between headquarters. The output of command support is the promulgation of commander's decisions and the subsequent control of their execution. Each phase of an operation makes different demands on command support, which should operate effectively in barracks, during deployment and on operations.

0659. Headquarters frequently need to be reconfigured to match the commander's needs and type of operation. Command support elements should be modular to allow such changes of configuration. Changes may be needed due to the requirements of specialist staff, the need for forward command, and to provide options for command from buildings, static vehicles, or on the move. Modular design also helps to keep headquarters small, which is important for their efficiency and survivability. Common command post design and staff procedures ensure that command support elements can be integrated rapidly. Since no two operations will be identical, the requirements for staff and command posts will vary between operations. Therefore the commander should conduct a **command estimate**, considering his requirement for staff and command posts, as soon as possible once warned for an operation.[19] Particular attention should be given to preventing unnecessary growth; within reason, the size of a staff is in reverse relation to its efficiency.

0660. Command support assets should have levels of strategic, operational and tactical mobility similar to those of the force they support, and appropriate protection. Headquarters and communications are normally high priority targets for adversaries. They should be protected by computer network defence, electronic protective measures, physical and electronic concealment, dispersion, mobility, ballistic protection and defence forces.

0661. The provision of digital CIS creates a number of options for the organization of command support and distribution of information around the battlefield. Operations staff should incorporate the requirements for command support in their estimate to enable information managers and ICS staff and providers to support the commander's intent. The planning of command support should consider and balance the requirements of superior headquarters and those of subordinate formations and units. The goal is the effective execution of, and support to, Mission Command. Further details of command support, including requirements for staff, liaison, headquarters and ICS are contained in Chapter 2 of AFM Volume 1 Part 8, *Command and Staff Procedures*.

Annexes:

A. Formulating Concepts of Operations and Mission Statements.
B. Qualities of Commanders.

[18] The term ICS includes all the elements required to deliver a capability to the commander, whereas 'Communications and Information Systems' (CIS) refers to equipment only.

[19] See also para 04A11.

ANNEX A TO CHAPTER 6

FORMULATING CONCEPTS OF OPERATIONS AND MISSION STATEMENTS

The Commander's Decision

06A01. In order to achieve decision in battle, a commander has to decide what would be decisive and how to achieve it. He then has to express his decision to his subordinates in the form of orders. At the tactical level, 'what a commander is to achieve' is given to him. It is the mission given to him by his superior. That mission should be described in terms of a task or tasks with their purpose: the commander is required to achieve the stated tasks within the spirit of their purpose. Since 'what he is to achieve' is given, 'how he intends to achieve it' is the core of his decision. It generally requires him to select an action that would be decisive, together with the supporting and sustaining actions necessary for it to be successful.

06A02. 'How he intends to achieve it' will normally be through a combination of actions to be undertaken by subordinates: what *they* are to achieve, where, and when. Thus the course of action he selects should include one decisive act, or operation, and a number of shaping or sustaining operations. The chosen course of action will include a broad allocation of troops to task and critical coordinating detail.

Concept of Operations

06A03. The commander must then make his decision explicit. He does so by formulating a concept of operations and stating missions for subordinates. The concept of operations describes how the commander intends to achieve his mission. It follows directly from his decision. It has two, or occasionally three, elements. The first is his **intent**. This is a succinct summary of the effects he intends to achieve over the enemy and the environment, related in time and space. If not obvious from the intent statement, the second element is the **scheme of manoeuvre**. This is a short but broad description of the manoeuvre of subordinates in space and time: it should include descriptive elements such as 'at night', 'silent', 'on a broad front', etc. The final element is the statement of **main effort**, which is to include the one task which comprises the main effort and the subordinate nominated to conduct it. It should normally be the decisive act or be clearly and directly related to it.

Mission Statements

06A04. A mission statement is a direct order to a subordinate. In formulating missions, the commander should allocate each subordinate a task or tasks together with a single purpose. One task will be the commander's main effort. Resources should be allocated such that every task is achievable. All subordinates, but particularly the subordinate on the main effort, should only be given one task wherever possible. The exception is the mission of a reserve, which may be given a series of contingent tasks with no stated unifying purpose, as in:

'Reserve. Be prepared to ...

a. ....

b. .... (etcetera)'

06A05. Tasks contained in mission statements should be substantive. Lesser tasks, such as conducting preliminary moves or establishing liaison, should not normally be considered as tasks which form part of mission statements. They should be contained elsewhere in the orders, typically as coordinating instructions. To include them in mission statements normally detracts from the clarity and simplicity of the plan.

06A06. Tasks and purposes should both be expressed in terms of action verbs whose success is measurable. Thus 'to attack' is not a good task; 'to seize' is better since its success is measurable. The task of 'to attack to seize' may be less good because it directs the subordinate how he is to achieve his task – in this case, by attacking. Possible alternatives, such as infiltration or a turning movement, are excluded.

06A07. Occasionally it may not be possible to express a purpose with such precision. It may be necessary to use a more generic purposive verb such as one of the core functions. However, relatively vague terms such as 'to shape' or 'to set the conditions for' should be avoided. Greater precision, such as an explanation of what shaping is required, or what the relevant conditions are, should generally be used. For clarity, the statement of purpose should normally be separated from the task by the words 'in order to'.

06A08. The total list of tasks assigned to subordinates should be sufficient and necessary. They should be *sufficient*, in that together they fulfil the whole of the commander's mission. They should be *necessary*, in that activities which are not required to fulfil his mission should be excluded.

06A09. The purposes of all subordinates' missions, when read together, should form a common thread which fulfils the commander's mission in an obvious manner. That thread should clearly reflect the logic of the intent statement. Listing missions in the order suggested by the logic of the plan may be more useful than listing them by subordinates' precedence in the Army List.

Clarity

06A10. Commanders should express their intentions clearly and succinctly. This includes the wording of the concept of operations and mission statements. They should be clear, concise, and unambiguous when taken as a whole. Repetition should be avoided and the minor conventions of staff duties **are to be broken** if doing so adds clarity. If there is repetition between the concept of operations and mission statements, the former may be reduced, whilst the latter may not; since mission statements are effectively orders. The concept of operations should be reduced *if that removes duplication and adds clarity*. If, when pruned, a concept of operations runs to more than a few sentences the underlying plan is probably too complex and will not succeed. Overall, both the concept of operations and the mission statements should be succinct and clear.

06A11. Since 'what the commander is to achieve' is given in the mission assigned to him, the objective (or end-state) is also given. It will occur when that mission, as foreseen at the time of assigning it, is achieved. It is therefore explicit in the commander's mission and should neither require undue emphasis nor clarification. Research has shown that expressing an end state in tactical concepts of operations, although well intended, has generally contributed to rather than reduced confusion on the part of subordinates. It should be avoided. Effort should instead be directed to ensuring that the mission given by the superior commander clearly indicates what is to be achieved. If the mission is not clear in terms of what is to be achieved, the superior commander should be asked to reconsider it.

06A12. Commanders should give orders that cover the achievement of the whole operation; that is, the achievement of all of the assigned mission. Some aspects may not be fully foreseeable in advance; it is legitimate to state in orders that details will follow in due course. The situation may change between giving the order and its execution or during it. In such circumstances the commander should review his mission and, if appropriate, give new orders. The existence of that possibility does not excuse subordinates writing their own objective or end-state.

06A13. In reviewing missions and tasks, the tasks ascribed to a subordinate may be found to have no single common purpose. In those circumstances the plan is flawed. The flaw will often lie in the selection of tasks or their allocation between subordinates (and hence, possibly, the task organization). Alternatively, the commander has not generated a clear view of how he wishes the operation to proceed: his intent is not clear. In that case he should revise his estimate.

ANNEX B TO CHAPTER 6

QUALITIES OF COMMANDERS

Leadership

06B01. **A commander should be a leader**. Military leadership is the projection of personality and character to get soldiers to do what is required of them. Field Marshal Slim described it as "*that mixture of example, persuasion and compulsion which makes men do what you want them to do*."[1]

06B02. Generalship is the highest form of military leadership and marks an officer suited for operational command at the highest levels. In terms of contemporary conflict, generalship requires more than professional knowledge and proficiency, intellect, and judgement to a higher degree than required at lower levels of command. It also requires the ability to deal competently with several other requirements associated with high command. These include an understanding of the political and legal dimensions of his command, the ability to handle the media, and the additional responsibilities that go with joint and multinational command. Therefore a wide range of command qualities and skills is required. As Professor Richard Holmes has observed, however, "*...save in the case of a few brilliant exceptions, generalship is not acquired by osmosis, but by a mixture of formal training and the practical exercise of command.*"[2] Yet such is the complexity of the task that there is no ideal example of generalship. As Frederick the Great observed: "*A perfect general, like Plato's republic, is a figment of the imagination.*"[3] Leadership is discussed in greater detail in Chapter 7.

Professional Knowledge

06B03 **A commander should be a master of his profession**. His subordinates will have no confidence in him unless he is. He should be professionally proficient at whatever level he commands and have insight into the wider nature of his profession. This is largely dependent on professional knowledge. In addition to formal education and training, a commander's knowledge is determined by experience and by personal study of his profession. With increasing rank, much of this professional study falls on the individual officer as self-development. The less the degree of relevant experience at the level he is commanding, the greater is the need to study. This calls for research, thought and reflection on the theory and practice of war, and an understanding of doctrine and its flexible application to meet new circumstances. Whereas in the past the principal threat was known and well-documented and study and training could be directed towards it, the location and scope of future conflict is far less certain.

06B04. Whilst a commander cannot hope to be an expert in all the technicalities of contemporary warfare, he should have sufficient knowledge to be able to judge the soundness of the technical advice given to him. Therefore he should know the capabilities and limitations of his weapons, communications, information and surveillance systems. To be a good administrator a commander also requires a sound knowledge of logistics and personnel matters.

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[1] Field Marshal Sir William Slim, *Courage and Other Broadcasts, Marks of Greatness. The Officer* Lecture at West Point (London: Cassell, 1957) p. 38.

[2] Richard Holmes, *Nuclear Warriors Soldiers, Combat and Glasnost* (London: Jonathan Cape, 1991) p. 284.

[3] From Instructions for Generals, quoted by General Sir John Hackett in *The Profession of Arms,* p. 220.

Intellect

06B05. Without intellect a commander will neither understand a complex situation in a campaign, major operation or battle nor be able to decide what to do. Apart from intelligence, intellect embraces clarity of thought (including the ability to seek and identify the essentials), creativity (embracing originality), and judgement and initiative. The most successful higher commanders in history have displayed a genius for war, transcending that associated with intellect alone. Napoleon, who often appeared to have luck on his side, remarked:

> *"If I always appear prepared, it is because before entering on an undertaking, I have meditated for long and have foreseen what may occur. It is not genius which reveals to me suddenly and secretly what I should do in circumstances unexpected by others; it is thought and meditation."*[4]

Napoleon's view thus reinforces the role of study in the education of commanders. Whilst genius is an innate quality, many of the intellectual requirements of senior commanders can be developed in training. In particular, clarity of thought and judgement, including powers of decision-making, can be enhanced through professional military education and training systems, including computer-assisted wargaming and exercises. The quality of intellect is closely linked to ***creativity, initiative*** and ***judgement***.

Creativity and Initiative

06B06. Commanders at all levels have to be creative in order to achieve surprise on operations. Surprise is, after all, a response to the unexpected. 'The unexpected' may be reflected in timing, direction, means or methods. Thus a commander should ask himself which directions, what timing, what means or methods would the enemy least expect; and then be imaginative in engaging the enemy accordingly. More generally, conceiving and undertaking actions that will be original requires an innovative and creative mind. **Originality**, one of the hallmarks of intellect, is arguably a key element of command and is at a particular premium at senior levels. Fuller wrote:

> *"Originality, not conventionality, is one of the main pillars of generalship. To do something that the enemy does not expect, is not prepared for, something which will surprise him and disarm him morally. To be always thinking ahead and to be peeping round corners. To spy out the soul of one's adversary, and to act in a manner which will astonish and bewilder him, this is generalship."*[5]

06B07. The ability to **innovate**, rather than adopt others' methods and models, singles out the original commander as one well equipped for adopting a Manoeuvrist Approach to operations. Creativity is also at a premium in preparing and generating forces for operations. Imaginative training not only develops collective performance; it also engenders a spirit of individual and collective enterprise. Whilst few successful commanders have been unoriginal, the more successful 'original' commanders have placed considerable emphasis in explaining their ideas to their subordinates in order to foster mutual understanding.

[4] See also General Sir Archibald Wavell, *Generals and Generalship* (London: The Times Publishing Company, 1941) p. 7, for his views on Napoleon and luck.

[5] Major General J F C Fuller, *Generalship.* p. 32.

06B08. **Initiative** is about recognizing and grasping opportunities. This requires flexibility of thought and action. For a climate of initiative to flourish, a commander should be given the freedom to use his initiative and he should, in turn, encourage his own subordinates to use theirs. Although initiative cannot be taught, it can be developed and fostered through a combination of trust and mutual understanding and by training. Commanders should be encouraged to take the initiative rather than fear the consequences of failure. This requires a training and operational culture which promotes an attitude of **calculated risk-taking** *in order to win* rather than to prevent defeat, which may often appear as the 'safer option'.

Judgement

06B09. **At the lowest levels, judgement is a matter of common sense, tempered by military experience.** As responsibility increases, greater judgement is required of commanders, which is largely a function of **knowledge and intellect**. To succeed, a commander should be able to read each major development in a tactical or operational situation and interpret it correctly in the light of the intelligence available, to deduce its significance and to arrive at a timely decision. However, a commander seldom has a complete picture of the situation and many of the factors affecting his choice of course of action are not susceptible to precise calculation.

06B10. Decisiveness is central to the exercise of command. It requires a balance between analysis and intuition. In the pursuit of timely decision-making required by Mission Command, a commander should have confidence in his own judgement. He should maintain his chosen course of action until persuaded that there is a sufficiently significant change in the situation to require a new decision. At times, it will be a conscious decision to decide not to make a decision. A commander requires **moral courage** to adopt a new course of action and the mental flexibility to act purposefully when the opportunity of unexpected success presents itself. Conversely, a commander should avoid the stubborn pursuit of an unsuccessful course to disaster.

06B11. **In times of crisis, a commander should remain calm and continue to make decisions appropriate to his level of command**. His calmness prevents panic and his resolution compels action. When under stress, the temptation to meddle in lower levels of command at the expense of the proper level – contrary to the decentralized spirit of Mission Command – should be resisted unless it is vital for the survival of that command. This rule, however, is easier to state than to follow in the heat of battle. The unfortunate Marshal Bazaine, who personally tended to the siting of individual gun batteries rather than committing his reserves during the battle of Gravelotte-St Privat during the Franco-Prussian War, was neither the first nor the last commander to become thoroughly distracted and so lose a battle.[6]

Courage and Resolve

06B12. A commander should be resolute, a quality which relates directly to the first Principle of War – *The Selection and Maintenance of the Aim.* Resolve helps a commander to remain undaunted by set-back, casualties and hardship. It gives him the personal drive and will to see the campaign, major operation or battle through to success. He should have the **courage**, **ability to take risk**, **robustness** and **determination** to pursue that course of action which he knows to be right.

[6] Michael Howard, *The Franco-Prussian War 1870-71,* (London: Methuen, 1981), p. 173.

06B13. Courage is a quality required by all leaders, regardless of rank or responsibility. **Physical courage** is a considerable moral virtue and characterizes a good leader. However, it is not sufficient on its own. The demands of warfare also require the **moral courage** to take unpopular decisions and to stick by them in the face of adversity. Command is not just about taking expedient short-term solutions to tactical problems. It also requires a commander to take the longer-term view in the interests of his campaign objectives, commensurate with the need to motivate and sustain his troops.

06B14. **Risk-Taking.** The willingness to take calculated risks is an important aspect of resolve but requires military judgement. Although chance cannot be eliminated in war, risk may be reduced by foresight and careful planning. However, a Manoeuvrist Approach to operations requires commanders to seek the initiative and take risks. Risk-taking means making decisions where the outcome is uncertain. In this respect almost every military decision has an element of risk. It is for a commander to determine the balance – whether the risk is worth taking. A good commander acts boldly, grasps fleeting opportunities and, by so doing, appears to have luck on his side.

06B15. **Robustness.** Physical and mental fitness is a pre-requisite of command. Rarely can a sick, weak or exhausted man remain alert and make sound decisions under the stressful conditions of war. As Field Marshal Montgomery advised: "*Keep fit and fresh, physically and mentally. You will never win battles if you become mentally tired, or get run down in health.*"[7] This is not to say that old commanders cannot be successful but they should remain young and active in mind. Senior commanders should also possess sufficient mental and physical stamina to endure the strains of a protracted campaign. In order to keep fresh and to maintain the required high levels of **physical and mental fitness,** commanders at all levels have a duty not only to themselves but also to their commands to obtain sufficient rest and to take leave, as appropriate.

Self Confidence

06B16. Self confidence is linked to resolve and to professional knowledge reflecting a justifiable confidence in one's own ability. A commander should maintain and project confidence in himself and his plans even when he may harbour inner doubts as to the likelihood of success. There is a fine divide between promoting a sense of self confidence and appearing too self-opinionated. Self confidence based on the firm rock of professional knowledge and expertise brings its own assurance and humility. Hollow confidence based on presentational qualities alone is easily punctured.

06B17. Commanders should have sufficient self confidence to listen constructively to the views of the staff and subordinate commanders without fear of losing their own authority. This form of dialogue acknowledges that a commander does not have all the answers and is receptive to good ideas. It also demonstrates confidence in subordinates and engenders a wide level of commitment. Above all, it promotes trust, mutual understanding and respect. A good commander does not, however, rely on others for the creative and imaginative qualities he himself should possess. He should instead have the skill to use others' ideas in pursuit of his objectives to support the interests of his command.

[7] Field Marshal Montgomery, *High Command in War (21st Army Group Publication, June 1945)* p. 44.

The Ability to Communicate

06B18. The ability to communicate effectively is an important aspect of command. However brilliant a commander's powers of analysis and decision-making, they are of no use if he cannot express his intentions clearly so that others can act. In peacetime, the temptation is to rely too much on written methods of communication which can be refined over time. Modern information technology and communications systems facilitate this approach. However, written papers, briefs and directives may not have the same impact as oral orders, consultations and briefings. Nevertheless, written copy continues to have an indispensable place in the exercise of command to ensure clarity and consistency of approach. Thus both oral and written powers of communication are vital to a commander.

Figure 6B.1 – The Ability to Communicate: Field Marshal Slim Addresses Soldiers of 14th Army, Burma, 1945

06B19. On operations, a commander should be able to think on his feet, without prepared scripts or notes, and be confident and competent enough to brief well and give succinct orders to his subordinates. Only in this way can he impose his will on his subordinates with his command of the situation and by his personal articulation of clarity of thought and expression. A commander should also be capable of briefing the Press in a convincing manner.

CHAPTER 7

THE MORAL COMPONENT

Chapter 7 considers the moral component of fighting power. It considers the ethical base which underpins the moral component. It discusses motivation, in which leadership plays a major role. The chapter then describes moral cohesion, and how this is fostered in the British Army.

OVERVIEW

7.1 Introduction

0701. The components of Fighting Power – conceptual, moral and physical - are described in Chapter 1. The moral component is concerned with the least predictable aspect of operations – the human element. If the human element is neglected, the penalties to be paid will be great and battle-losing. If time and effort are invested in the human element, all things become possible. The three elements of the moral component are the ethical base to military behaviour; motivation; and moral cohesion.

7.2 Ethical Base

0702. A strong moral component has its foundation in ethics, which provide the context for developing the motivation and cohesion of soldiers. Ethics is concerned with what is generally believed to be right and wrong. Without attention to this by commanders, operations will be denied moral strength. In addition, they and their soldiers may be avoidably exposed to legal proceedings. Unless soldiers on operations are individually and collectively at ease with their consciences, their will to fight will be diminished.

Moral Strength

0703. Some of the most barbarous and unprincipled armies in history have had tremendous morale and will to fight, based on excellent motivation, leadership and management. They have won their battles and achieved their commander's purposes. This observation might suggest that tactical and strategic victory is what counts, regardless of the methods used to achieve it. This might have been a suitable doctrine for other armies in other circumstances. But the British Army from its modern origins has been rooted in the spirit of democracy. This, together with social and cultural influences, has created a very clear understanding of the necessity to act within the bounds of what is generally thought to be right. Soldiers are unlikely to be at ease with themselves or each other if they are using physical force without doing so from a position of moral strength.

0704. Military operations by an army of a democratic free society cannot be sustained without the support of that society. Political direction, government resourcing, and recruiting depend on it. The British Army must give continuous attention to the strength of its moral base, because an ethically educated society will not give its support unless its army acts from a position of moral

strength. There is also an obvious need to describe the moral base clearly, both internally and externally.

> *'Soldiers universally concede the general truth of Napoleon's much quoted dictum that in war 'the moral is to the physical as three is to one'. The actual arithmetical proportion may be worthless, for morale is apt to decline if the weapons are inadequate, and the strongest will is of little use if it is inside a dead body. But although the moral and physical factors are inseparable and indivisible, the saying gains its enduring value because it expresses the idea of the predominance of moral factors in all military decisions. On them constantly turns the issue of war and battle. In the history of war, they form the most constant factors, changing only in degree, whereas the physical factors are different in almost every war and every military situation.'*
>
> Sir Basil Liddell Hart, *Strategy*, Faber & Faber, 1941

Moral Responsibility

0705. Those exercising physical force cannot avoid the issue of moral responsibility. The fact that everybody taking part in a military operation is morally involved in it can provide a strong basis for motivation as well as imposing moral responsibilities. This is in part a consequence of the potentially destructive power of carrying and controlling lethal weapons. As bearers of weapons all soldiers must be prepared personally to make the decision to engage an enemy or to place themselves in harm's way. While many public services involve being in harm's way while working for a greater good, it is the unique feature of military service to have unlimited liability to kill or be killed in deliberate and organized lethal combat with other human beings. Moreover, that unlimited liability extends to obeying orders which may have lethal intent or consequences, or giving them to others. This extends moral responsibility beyond purely personal actions. Every soldier is morally responsible for his actions, whether obeying orders or not. And if a commander gives an order to another person, he is as morally responsible for the consequences of that order being carried out, as the subordinate who chooses to obey the order. For commanders this moral responsibility extends to circumstances where the *failure* to give orders has moral consequences.

0706. Whether he likes it or not, society will judge a soldier's actions on the basis of national and international law. The Nuremberg trials after WW2 are a clear reminder of this. Furthermore, the greater visibility afforded by NEC will allow more opportunity for such actions to be scrutinized after the fact. But it is not always possible to have sufficient understanding of the context of orders received to be able to make a balanced moral judgement during operations: for reasons of distance, operational secrecy, or the confusion of battle. The better placed he is to understand, the more an individual is expected to assure himself of the morality of actions or orders. This will often place a specific duty on officers to consider the moral dimension. This is one of the reasons why it is important to have junior officers at the point of tactical operations. It is equally important that all must be educated both in the moral responsibilities on which they will be judged, and their accountability under the law.

Legal Responsibility

0707. The concept of personal moral responsibility is enshrined in law. It is no defence to cite superior orders as an excuse for acting outside the law. The Rome Statute of the International Criminal Court specifically provides that a superior order will not relieve a person of criminal responsibility unless he was under a legal obligation to carry out the order, or he did not know the order was unlawful and the order was not manifestly unlawful.

0708. The Law of Armed Conflict (LOAC) governs the activities of states that are in conflict, and some other situations. Much of that law is incorporated into the Hague Rules and the Geneva Conventions. Three core principles of the LOAC are *military necessity*, *humanity*, and *proportionality*. Combatants are individually required to comply with the law, and they must be trained in it (such training being a requirement of international law in itself). Breaches of LOAC by members of the British Forces and accompanying civilians can be tried in the UK, wherever an offence might have been committed. Grave breaches of the Geneva Conventions can be tried by British Courts, regardless of the nationality of the accused. The LOAC determines the protection to be afforded to combatants and civilians, their property, and the types of weapons and ammunition that can lawfully be used. It makes special provision for the wounded, sick, medical personnel, chaplains and prisoners of war.

0709. Rules of Engagement are not laws, but commanders' directives, expressed as permissions and prohibitions governing the use of force. They are drafted so that a person complying with them will always act within the law. They are also used for reasons of operational security, avoidance of fratricide, political prudence or local sensitivity.

0710. The law seeks to reflect society's attempt to codify its commonly held ethical and pragmatic standards. International law is based on consensus either through customary principles (the practice of states) or agreement through treaties and other formal documents. The law evolves constantly, but the ethical standards that drive it are much slower to change. Commanders should always have access to legal advice in interpreting the law and rules of engagement. They, and their soldiers, will be better prepared if they have a broad understanding of the ethical principles behind those laws.

The Decision to Use Military Force

0711. The morality of actions *within* a military operation is affected by the morality of the operation itself, as well as by the more immediate circumstances. Few soldiers may have sufficient access to the relevant context to judge whether a military operation is lawful. The decision to deploy UK Forces to engage in armed conflict will always be taken at the highest political and military level and the decision will be subject to scrutiny by Law Officers and by others. In the United Kingdom we can have the highest degree of confidence that our armed forces will not be launched into operations that are unlawful. This places a considerable moral, and in most cases legal, responsibility on politicians and the most senior military officers. For soldiers to believe that their operations are just, the case may need to be made down the chain of command – particularly if a counter case is being made in the media. Belief in what one is doing is a very strong source of motivation and high morale.

7.3 Motivation

Morale

0712. High morale is evident when troops are well-motivated. Motivation on operations presents its own particular challenges. Physiological needs, such as food and security, are powerful motivators and are typically provided for in the physical component of fighting power. Land operations often require these physiological needs to be suspended and soldiers to behave counter-intuitively. Such behaviour is motivated at different levels and, in different ways for every individual. A soldier in a volunteer army needs continuous motivation to serve at all – which is why the British Army has the 'Military Covenant'. Soldiers need to be motivated for any particular operation or

task, which requires sound decisions and effective leadership. Since poor care of people and poor administration undermine motivation, good man-management is also required. Motivation can also be undermined if spiritual needs are not met. These positive efforts to achieve strong motivation need to be underpinned by the habit of obedience, reinforced by recognition of the consequences of disobedience. This is achieved by a regime of discipline implemented with the authority of rank. The successful motivation that results from these efforts is often described as high morale. It is the spirit which inspires soldiers to fight. It derives from, and depends upon, high degrees of commitment, self-sacrifice and mutual trust.

'Morale is a state of mind. It is steadfastness and courage and hope. It is confidence and zeal and loyalty. It is élan, esprit de corps and determination. It is staying power, the spirit which endures to the end – the will to win. With it all things are possible, without it everything else, planning, preparation, production, count for naught.'

Gen George C Marshall, Address at Trinity College, Hartford, Connecticut, June 1941

0713. High morale and operational success reinforce each other. Morale is that intangible force which can move men to endurance and courage in the face of hardship, fatigue and danger. It makes each individual in a group, without counting the cost to himself, give his utmost to achieve the common purpose. It makes him feel that he is part of something greater than himself. It results from many factors. Besides tactical success, these factors include confidence in equipment, good training and sound administration. However, it is ultimately bred of confidence in both one's peers and superiors and the conviction that objectives are achievable. All, irrespective of their task or location, need to feel that what they do really matters, and that it has a direct bearing on the result of the campaign. This allows them to take pride in playing (and, later, relating) their part in it.

0714. Morale requires the forging in peace of close bonds of professional and personal trust which will withstand the stresses of battle. The ways by which the British Army seeks to achieve resilient morale, based on strong foundations built before operations are described in the following paragraphs.

The Military Covenant

0715. Soldiers are bound by service. The nature of service is inherently unequal: soldiers may have to put in more than they receive. Ultimately, they may be called upon to make personal sacrifices - including death - in the service of the Nation. In putting the needs of the Nation, the Army and others before their own, they forgo some of the rights enjoyed by those outside the Armed Forces. So, at the very least, British soldiers should always be able to expect the Nation, and their commanders, to treat them fairly, to value and respect them as individuals, and to sustain and reward them and their families with appropriate terms and conditions of service. This mutual obligation forms the Military Covenant between the Nation, the Army and each individual soldier. To a greater or lesser extent such a common bond of identity, loyalty and responsibility has sustained the Army and its soldiers throughout its history. It is a covenant, not a contract, and it is binding, in every circumstance. Unless Nation, Army and soldier alike recognise and understand that it must be upheld come what may, then it fails. If it fails then first goodwill and then, ultimately, trust, is withdrawn. It has perhaps its greatest manifestation in the annual commemoration of Remembrance Day, when the Nation keeps covenant with those who have given their lives in its service.

Leadership

0716. Skill in the techniques of leadership is the foremost quality in the art of command.[1] It contributes very largely to success in war and all other military activities. There is no prescription for leadership and no prescribed style of leader. Military leadership is a combination of example, persuasion and compulsion dependent on the situation. Moreover, leadership is not the preserve of rank: any British soldier may be called upon to exercise leadership in action when circumstances demand. Leadership is, however, the principal duty of all officers – commissioned, warrant and non-commissioned. Commissioned officers in the British Army have a special responsibility for leadership. The Queen's Commission means that it is *always* the duty of the officer to take moral responsibility for the task and the led. This includes setting an example both on and off duty. Leadership is essentially personal and no two leaders are identical. Leaders should be selected not because they can be made to conform to some ideal, but for their own leadership potential and qualities.

0717. Military success, whether in battle or any other military activity, is the achievement of the common purpose: the mission or task. The principal task of military leaders at all levels should be to motivate those they command to accomplish the mission. Leadership should be the inspiration in all military activity, not just in war or on other operations. For leaders at every level the responsibilities of leadership encompass the whole of their soldiers' day-to-day existence. Good leadership stirs individuals, transforms teams, unites diverse multinational contingents, and turns doctrinal precepts into action. It can transform limited resources and overcome the greatest difficulties. The qualities of good leadership are developed by constant training, experience and hard work.

0718. **Leadership Qualities**. Leaders are soldiers first. They must, therefore, have all the personal qualities, values and standards that are demanded of their soldiers. They should draw out these same qualities in their subordinates, by example and direction, so as to achieve their purpose. Leaders should develop these qualities in themselves by practice and study, reinforced by experience. Challenging as this may be, it is merely the starting point for the development of those further qualities which separate the good leader from the led. Leaders are expected to take full responsibility for those they lead, and the tasks they are to undertake. This includes the responsibility for the human costs of military success; a burden which should be shouldered even in the ruthless pursuit of victory. They should have the creativity which underpins the conceptual component of fighting power. They need a level of judgement which allows them to cut through complexity, chaos and friction to the nub of any situation and resolve it. Above all, through example, integrity, and presence, leaders should inspire those around them. Without this last quality, the order to 'follow me' will go unheeded.

0719. **Leadership Responsibilities**. The above qualities equip leaders to discharge their responsibilities for both the common purpose and those they lead. Whilst recognising that these responsibilities are all-encompassing, they can be categorized, in order to assist comprehension. These responsibilities are as follows:

a. **To Understand.** The leader should understand both the mission and the men. Soldiers, too, should know where they stand with their leader, and where he is leading them. This depends on the leaders having a high degree of self-understanding.

[1] See Chapter 6, Figure 6.1.

b. **To Decide.** Decision-making is an aspect of command. In all planning and execution, the leader is responsible for deciding the course of action.[2]

c. **To Communicate.** True communication involves assimilating and dealing with feedback as well as disseminating information and orders.

d. **To Empower**. The leader should allow the led to do what they can: to give them the scope for excellence.

e. **To Inspire.** Inspiration is the central responsibility of leadership. Leaders should inspire the led to do things against which their senses may rebel.

f. **To Achieve.** Achievement is the unifying purpose of leadership. High morale and cohesion should mean that inspiration and example will suffice; but coercion and self-sacrifice may be required in the most demanding circumstances of battle.

g. **To Sustain**. The leader should sustain the team, during and between missions and tasks.

0720. **Leadership Style**. Every leader has a unique personal style, based on individual character and the application of various leadership techniques to suit the circumstances. However, the style should fit the circumstances, and the leader should be able to adjust accordingly. Achieving a balance between consistency and adjustment relies on having a range of leadership techniques. The leader who encourages debate at one moment may demand instant obedience at another. Although the ability to get on with people is extremely useful and desirable in a leader, leadership is not a popularity contest. It is also important to understand the personalities of those one leads. Individuals respond differently to others, including their leaders. Whatever their personality, there is one characteristic which is important in all soldiers and highly desirable in all leaders: a sense of humour. Ultimately, leadership is a relationship between the leader and the led. The better developed that relationship, the better it will deliver all that is asked of it on operations.

Soldier Management

0721. In the British Army management means the allocation and use of resources, especially people and money. Because the British Army's most important resource is its soldiers, their effective and efficient management is paramount. The Army is a disciplined and regulated organisation which does most of its work in teams. However every soldier is also an individual. So good soldier management results in cohesive teams and fosters the development of individuals and the conditions in which soldiers will give their best to achieve the common purpose. Most importantly, the demonstration of care by leaders results in mutual trust and respect across ranks. Military management addresses the welfare, education and development of all soldiers. Such development may be physical, intellectual, moral and spiritual. It is concerned with the whole-life development of every member of the Army. Good management can contribute to high morale by keeping the Military Covenant with every soldier. It requires considerable technical knowledge and expertise, especially in administration, law, welfare, health and education. All ranks have a duty to understand and implement the sound management of the soldiers under their command. Junior commanders are particularly responsible for the wellbeing, care and development of their soldiers. This demands considerable effort and commitment . The Army provides a range of experts and access to civilian agencies to give technical advice. However, it is the leader's responsibility to make use of them.

[2] The principles of decision-making are described in Chapter 6, Paragraph 0652.

Spiritual Sustenance

0722. In meeting physiological needs, and providing leadership and soldier management, it is important not to neglect provision for spiritual needs, particularly in the stress of operations. For many soldiers, spirituality informs their sense of self, of others and the world. It can profoundly shape an individual's values and standards, and the associated sense of responsibility. It can equip him to make sense of disorder, to resolve moral dilemmas, and to overcome grief and guilt. These abilities reduce vulnerability to psychological injury. Access to religious support, in the form of chaplains and their ministry, along with the time and space to reflect or pray, are all important to the long-term sustenance of individuals within a military force. This is borne out by the fact that religious interest and concern usually increases on operations.

Rank and Discipline

0723. Motivation faces its toughest test in the face of death. However successful all the positive motivational factors may be, there may come a time when obedience to orders alone motivates the required behaviour. Such orders may not be obeyed unless the habit of obedience to superiors has been established, and strengthened by the sanction of disgrace and punishment for disobedience. The motivation necessary for successful land operations requires a hierarchy of rank underpinned by disciplinary powers appropriate to military operations.

7.4 Moral Cohesion

0724. **Principles**. Operations are not merely individual enterprises and so their success depends on how well individuals work together in teams. Cohesion binds together the individuals in a team, providing resilience against dislocation and disruption. Those factors which result in strong individual motivation also develop cohesion when applied collectively – the most obvious being leadership. But there is more to strong cohesion than achieving collective strong motivation. The additional principles of cohesion are:

a. **Continuity**. Individual friendships and collective bonding are encouraged when teams are kept together. This creates a sense of belonging, supported by particular habits and traditions. The Army's institutional arrangements for grouping and posting can assist or frustrate such continuity.

b. **Shared Experience**. Cohesion is assisted by sharing experiences. Sharing success develops group confidence – esprit de corps. Sharing adversity, as opposed to failure itself, can develop group determination. Thus the way in which a common enemy is described to a team can greatly influence cohesion, as many orators know.

c. **Clear Task**. Teams tend to unite around a common task. When one is not obvious cohesion can dissipate rapidly. Leaders should provide worthwhile tasks at all times.

d. **Anticipation.** Groups develop over time according to broadly predictable patterns. Any underlying divisions are exposed under stress. By understanding and anticipating group behaviour, team members, and particularly their leaders, can more easily build cohesion during both training and operations.

e. **Shared Values.** The sharing of values provides a predictability and uniformity of behaviour amongst team members which can enhance cohesion. If these shared values also prohibit anti-social behaviour, there is a far stronger cohesive effect as every person benefits individually from the security and mutual reliability which should result. Consequently the British Army places great emphasis on a wide understanding of clearly stated Values and Standards.

'More than anything else, men have fought and winners have won because of a commitment – to a leader and a small brotherhood where the ties that bind are mutual respect and confidence, shared privation, shared hazard, shared triumph, a willingness to obey and determination to follow.'

Lieutenant General Victor Krulak, *First to Fight*, US Naval Institute Press, 1984

Values and Standards

0725. Values and Standards are not just a list of qualities required of each individual soldier. They are a moral requirement and have functional utility. Upholding them is the collective responsibility of the Army, and each of its constituent units. They are the foundations of teamwork, which multiplies the Fighting Power of each individual. They are interdependent. If any of them are lacking, the others - and hence the team - are threatened. They are fostered and enhanced by good leadership, training, motivation and management, throughout the chain of command. While their application by leaders was described earlier, what is below applies to all, and are therefore published separately in 'The Values and Standards of the British Army'.

'The military virtues are not in a class apart; "they are virtues which are virtues in every walk of life … none the less virtues for being jewels set in blood and iron." They include such qualities as courage, fortitude and loyalty. What is important about such qualities as these … is that they acquire in the military context, in addition to their moral significance, a functional significance as well. The essential function of an armed force is to fight in battle. Given equally advanced military techniques a force in which the qualities I have mentioned are more highly developed will usually defeat a stronger force in which they are less. Thus while you may indeed hope to meet these virtues in every walk of life and a good deal of educational effort is spent on developing them as being generally desirable, in the profession of arms they are functionally indispensable. The training, group organizations, the whole pattern of life of the professional man at arms is designed in a deliberate effort to foster them, not just because they are morally desirable in themselves, but because they contribute to military efficiency.'

"*The Profession of Arms*" - The 1962 Lees Knowles lectures, Lt Gen Sir John Hackett

0726. **Selfless Commitment**. The British Army must be structured and trained to fight, not for the convenience of administration in peace. On joining the Army soldiers accept a commitment to serve whenever and wherever they are needed, whatever the difficulties or dangers may be. Such commitment imposes certain limitations on individual freedom, and requires a degree of self-sacrifice. Ultimately it may require soldiers to lay down their lives. Implicitly it requires those in positions of authority to discharge in full their moral responsibilities to subordinates. Selfless commitment is reflected in the wording of the Oath of Allegiance which is taken on attestation. In it, soldiers agree to subordinate their own interests to those of the unit, Army and Nation, as represented by the Crown:

"I swear by almighty God that I will be faithful and bear true allegiance to Her Majesty Queen Elizabeth II, her heirs and successors and that I will as in duty bound honestly and faithfully defend her Majesty, her heirs and successors in person, crown and dignity against all enemies and will observe and obey all orders of her Majesty, her heirs and successors and of the generals and officers set over me".[3]

0727. Irrespective of private beliefs, this Oath embodies the context within which the British Army fights and operates. It expresses the formal yet personal loyalty of every soldier in the British Army to the Sovereign as Head of State. This focus on the Sovereign means that whatever the political views of individual soldiers, the British Army is essentially apolitical. Similarly, the Sovereign is the authority for the Commissions and Warrants of the various categories of officers. There is a similar formal yet personal relationship of Corps and Regiments to the Sovereign. These relationships find expression in the Colours, Standards and other emblems of Regimental and Corps spirit which derive from the Sovereign, and in the Ceremonial which demonstrates publicly the role of the Army in the fabric of the nation. Personal commitment is the foundation of military service. Soldiers must be prepared to serve whenever and wherever required and to do their best at all times. This means putting the needs of the mission and of the team before personal interests.

'Courage is not merely a virtue; it is the virtue. Without it there are no other virtues. Faith, hope, charity, all the rest don't become virtues until it takes courage to exercise them. Courage is not only the basis of all virtue; it is its expression. True, you may be bad and brave, but you can't be good without being brave. Courage is a mental state, an affair of the spirit, and so it gets its strength from spiritual and intellectual sources. The way in which these spiritual and intellectual elements are blended, I think, produces roughly two types of courage. The first, an emotional state which urges a man to risk injury or death - physical courage. The second, a more reasoning attitude which allows him to stake career happiness, his whole future on his judgement of what he thinks either right or worthwhile - moral courage. Now, these two types of courage, physical and moral, are very distinct. I have known many men who had marked physical courage, but lacked moral courage. Some of them were in high positions, but they failed to be great in themselves because they lacked it. On the other hand, I have seen men who undoubtedly possessed moral courage very cautious about physical risks. But I have never met a man with moral courage who would not, when it was really necessary, face bodily danger. Moral courage is a higher and a rarer virtue than physical courage. All men have some degree of physical courage - it is surprising how much. Courage, you know is like having money in the bank. We start with a certain capital of courage, some large, some small, and we proceed to draw on our balance, for don't forget courage is an expendable quality. We can use it up. If there are heavy, and, what is more serious, if there are continuous calls on our courage, we begin to overdraw. If we go on overdrawing we go bankrupt - we break down.'

Field Marshal Sir William Slim, *Courage and Other Broadcasts*, Cassell,1957

0728. **Courage**. All soldiers should be prepared for tasks that involve the use of controlled lethal force to fight. They may be required to take the lives of others, and knowingly to risk their own. They may need to show restraint, even when doing so involves personal danger. They may need to witness injury or death to their comrades but still continue with the task in hand. This requires physical courage, and soldiers will depend on each other for it. Moral courage is equally important. That is the courage to do what is right even when it may be unpopular, or involve the risk of ridicule or danger, and to insist on maintaining the highest standards of decency and behaviour at

[3] Those who do not believe in God "Solemnly, sincerely and truly declare and affirm".

all times and in all circumstances. In the end this will earn respect and foster trust. Courage - both physical and moral - creates the strength upon which fighting spirit and success on operations depend. It is a quality needed by every soldier, but it is especially important for those placed in positions of authority, because others will depend on their lead and respond to it.

0729. **Discipline**. To be effective on operations, the Army must act as a disciplined force. Commanders should be certain that their orders will be carried out, and everybody must be confident that they will not be let down by their comrades. Lives may depend on it, as may the success of the mission. Discipline is the glue that holds soldiers together when threatened; it is the primary antidote to fear. Supported by team loyalty, regimental spirit, pride, trust and professionalism, discipline keeps soldiers from yielding to the human stress of battle. The best discipline is self-discipline: innate, not imposed. The Army expects self-discipline from every soldier, and training aims to draw it out. Good discipline does not stifle individuals, but rather it enables them to achieve more than they would expect of themselves without it. Good discipline means that soldiers of all ranks are trained to obey their orders under the worst conditions of war, and to do so with imagination and resource. Because discipline is so vital to success on operations, commanders must be able to enforce it when necessary. That requires clearly understood rules and a military legal system which can deal with offences such as absence, desertion or insubordination which are not found in civil law. And if it is to work in war, such a system must be in place in peace, for it cannot be turned on and off at will. Discipline should therefore be rigorously but fairly upheld by all those in positions of authority, and self-discipline should be deeply rooted.

0730. **Integrity**. There is a unique significance to personal integrity in soldiering, because all soldiers should be prepared to engage the enemy in combat directly and by choice. To achieve success on operations, soldiers must be welded into the most effective, friction-free teams possible. Within the team, internal pressures must be minimized, in order to deal with the potentially deadly external ones. Individual soldiers must identify their own needs, desires and ideals and subordinate them to those of the organisation of which they are part. This applies in peace as well as in combat, in barracks and on training as much as on operations. Soldiers should have complete trust in the integrity of each of their comrades. Personal integrity is essential to mutual trust, and thus to both leadership and comradeship. This integrity is seriously eroded by deceit, dishonesty or selfishness. Soldiers depend on mutual trust to the highest degree: their lives are literally in their leader's and their comrades' hands. They should feel able to trust their leaders and their orders with their lives. They share the closest of quarters with their comrades. They should have profound respect for the individual, because their cause and their lives depend upon it. Objectionable personal behaviour among soldiers is unacceptable, because it can undermine team cohesion and fighting power, ultimately placing lives at risk. The chain of command is responsible for defining and maintaining standards of personal behaviour in the Army by example and direction. All forms of deceit or dishonesty constitute a lack of integrity, and therefore call into question whether an individual can be relied upon. Such activity covers a wide spectrum. It includes any behaviour which raises doubts about an individual's character, as well as committing criminal offences. If a soldier is known to be selfish or dishonest, trust between comrades will be damaged and tensions created within the team will reduce its effectiveness. This is as true of those who may misuse public funds, or who make fraudulent claims (however small the sums involved), as it is of those who are dishonest in any other way. Integrity also demands that those who are in positions of authority, at whatever level, are fair and consistent at all times to those under them. Only then will they earn the respect and loyalty that are essential to leadership. The leader's example in personal behaviour is vital, and this responsibility increases with rank.

0731. **Loyalty**. Loyalty binds all ranks of the Army. It ties the leader and the led with mutual respect and trust. It goes both up and down. It transforms individuals into teams. It creates and nourishes the formations, units and sub-units of which the Army is composed. The Nation, the Army and the chain of command rely on the continuing allegiance, commitment and support of all who serve: that is, on their loyalty. Conversely, soldiers of all ranks, and their families, should be confident that the Army and the Nation will treat them with loyalty as well as justice. The Army's loyalty to the individual - its obligation in the Military Covenant – manifests itself in justice, fair rewards, and life-long support to all who have soldiered. Those who are placed in positions of authority should be loyal to their subordinates. They should represent their interests faithfully, deal with complaints thoroughly, and develop their abilities through progressive training. For their part, subordinates should be faithful to their leaders, their team, and their duty. Such loyalty is expected, but it must also be earned through commitment, self-sacrifice, courage, professionalism, decency and integrity. Loyalty to the Army requires all ranks to foster and adhere to these qualities off duty as well as on duty. Personnel who behave badly when off duty not only let themselves down by their lack of self-discipline, but are being disloyal. They damage respect for the Army, their unit, and for other soldiers who may well suffer as a result.

0732. **Respect For Others**. Service in the British Army requires more than loyalty to the Crown, and to military superiors, subordinates and comrades. It also involves the respect for others which is a hallmark of the British Army. It flows from the duty to put others first and means that there is no place for prejudice or favouritism. Respect for others is based on self-respect and operational need. It depends on selfless commitment and integrity, and on the behaviour which is set out in 'The Values and Standards of The British Army'. Without these the individual soldier and the Army itself risk forfeiting the respect which underpins morale. Like loyalty, respect for others goes both up and down the chain of command and sideways among peers. It also extends to the treatment of all human beings, especially the victims of conflict, the dead, the wounded, prisoners and refugees. The responsibility of bearing arms and using lethal force makes it vital that all soldiers act properly under the law and maintain the highest standards of decency and justice at all times, even under the most difficult of conditions. Indeed, the need for such decency, compassion and respect for others is increased by the conditions in which soldiers may have to live and operate. They will often have no choice of the company they are required to keep, and no relief from it for extended periods. The conditions in which they have to co-exist may be cramped, uncomfortable and stressful. In such circumstances respect for all others is vital. Commanders should understand that they have a continuous responsibility for the well-being of their subordinates, and that any disregard or abuse of that responsibility amounts to neglect. More significantly, soldiering is about duty, or it is nothing, so soldiers should be less ready to claim their own rights than to uphold the rights of others. It is only by putting our duty before ourselves that we secure the rights of others.

Ethos

0733. Sustained successful cohesion results in a group or organization having a distinctive character and identity – its ethos. The British Army has certain enduring characteristics which are part of this. These are embodied in its Corps and Regimental spirit. The British Army is composed of Arms, Corps and Regiments from which units combine to supply operational capabilities. The number, types and organisation of Arms, Corps and Regiments change according to the operational need. Roles and structures may also change. They may amalgamate, multiply or disband. Yet despite such changes, Corps and Regiments have acquired tremendous spirit and distinctive identity from the reputation earned from success in battle, sometimes over many centuries. In addition, British soldiers usually remain in the Regiments or Corps they joined as re-

cruits. In many cases, they return to the same operational units throughout their service, resulting in depths of familiarity and comradeship which give a unique edge to the morale and teamwork of the British soldier. This spirit is manifested in distinctive uniforms, emblems, music and other signs which contribute to the special pride British soldiers have in their Corps and Regiments. Its characteristics include comradeship, example, pride and flexibility. These attributes of Corps and Regiments are also a key element in observing the Nation's and the Army's responsibilities to the individual soldier under the Military Covenant.

a. **Comradeship**. The Corps or Regiment is the focus for the comradeship which plays a great part in the operational strength and the rewards of the profession. The purpose of soldiering is deadly serious, but soldiering should be enjoyable and rewarding if volunteers are to join and stay. The rewards of soldiering include remuneration and self-esteem. Self-esteem is fostered by due recognition of good service. This ranges from informal verbal congratulation to awards and honours. Comradeship includes both the powerful bond of adversity shared in battle or on operations, and also the mutual respect and friendliness which enhances personal fulfilment in the Army on and off duty. It is manifest on operations, training and the social life of the Army. It embraces soldiers' families.

b. **Example**. The knowledge of past adversities mastered by the unit or formation of which they are part inspires soldiers to live up to the standards of their predecessors. The examples of regimental history focus the will to succeed in a way that augments the imperatives of present loyalty and discipline.

c. **Pride**. Pride inspires individuals and teams to the greatest heights of self-sacrifice and valour. It also binds together people from the widest variety of backgrounds, and gives them an identity which transforms them from a collection of individuals into a professional group.

d. **Flexibility**. Flexibility means that although roles and missions change, the Corps or Regiment is a lifelong home to its members, wherever they are serving. It is the focus for the responsibility the Army has for all soldiers, serving and retired, and their families. The Corps or Regiment is an invaluable part of the investment the Army should make in return for the soldier's unlimited liability.

All of these mean that the Corps or Regiment is often regarded as a family - the military community in which most British soldiers do all their operational service and which embraces and cares for them and their families literally until death. In some cases this responsibility extends beyond death; for example, for widow's pensions. Corps and regiments are also the communities in which soldiers acquire and develop the military ethos, delivering the moral component of land operations.

0734. The strength of an army's moral component is not easy to gauge, and those within the Army are often poorly placed to make objective judgements. Commanders must therefore endeavour to understand the intangible nature of the moral component. .

'Give me...such men as made some conscience of what they did...the plain russet-coated captain that knows what he fights for and loves what he knows.'

Oliver Cromwell, letter of September 1643. Thomas Carlyle, *Letters and Speeches of Oliver Cromwell.*

CHAPTER 8

DEVELOPING FIGHTING POWER

Chapter 8 describes the processes of preparing and generating Fighting Power. It reviews the concept of Fighting Power, considers the path from force preparation to force generation, and describes the activities which contribute to them.

8.1 Introduction

0801. The concept of Fighting Power, with its conceptual, physical and moral components, was described in Chapter 1. The purpose of developing Fighting Power is to generate forces sufficiently strong in all three components to win campaigns and operations.

OVERVIEW

0802. All non-operational activities undertaken by the Army should contribute to developing Fighting Power. This even includes leave, which allows individuals to recover physically and psychologically before returning to other activities. Fighting Power can also be developed while engaged on operations, either explicitly by preparation and rehearsal, or implicitly from the experience and cohesion gained.

0803. Developing Fighting Power comprises:

a. **Force preparation,** which is the continuous process of manning, equipping, training and educating the Army *for operations in general.*

b. **Force generation,** which describes the activities required to produce forces ready *for a particular campaign or operation.*

Force preparation is common to the whole Army. Conversely force generation affects nominated elements at specific times since the whole Army cannot be at immediate readiness for operations at all times. Force preparation is broad-based; force generation tends to focus on the physical component, including equipment and material preparation, collective training, and bringing units up to strength.

0804. Generating a force can be seen as a single episode occurring during the continuing process of force preparation. From the perspective of a specific operation, force generation is one of the final steps of readying the force. From an individual perspective, these steps bring him to the point where he and his unit are trained, equipped and prepared for an impending operation. Force preparation and force generation consist of a number of interlinked activities that contribute to operational effectiveness. Many affect more than one component of fighting power. For example, activities affecting the moral component also impact on the physical component by affecting retention and manning levels.

0805. Forces are *prepared* for tasks outlined in the MOD's planning assumptions and then *generated* for specific contingencies. These broadly fall into three categories: UK national operations; operations in which the UK is the lead or framework nation; and alliance and coalition operations. Since forces are prepared for different requirements, the mechanisms by which they are prepared

vary. A readiness mechanism is required to prepare and generate forces to appropriate levels of collective performance in the required timeframes. Funding, which reflects national priorities, is a significant constraint and a large proportion of Defence spending contributes to force preparation or generation. Annual spending plans exist to manage these processes.

8.2 Developing Fighting Power

0806. This section describes the activities that contribute to force preparation and generation. Although they are described here separately by component of Fighting Power, they are closely interlinked.

The Conceptual Component

0807. The conceptual component is pre-eminent since understanding the nature of conflict and how to operate within it underpins the other two components. The pre-eminence of the conceptual component places a high value on education. It includes the ***principles of war***, an ***understanding*** of conflict and how to operate within it, and the requirement for ***conceptual development***. The principles of war are relatively enduring whereas conceptual development is the way the Army's understanding changes over time. An Army's understanding is broad-based and much of it is explicit in doctrine, but explicit doctrine is not necessary for an army to know how to fight. Some doctrine can be implicit. Implicit doctrine is, in effect, shared understanding without written doctrine. The risk is that implicit doctrine is not actually common across a force, is subject to individual interpretation, and encourages false assumptions about others' understanding. The Army's understanding of conflict and how to operate within it should therefore be captured as explicit doctrine. Although conceptual development work is the responsibility of a small element of the Army, all contribute to it. Debate should be encouraged and military publications exist to enable it.

0808. The Army should be broadly educated to enable continuous development and adaptation to the environment. Since force preparation is iterative, education should continue throughout an officer's or soldier's career. It broadens horizons, develops better- informed thought processes, and improves decision-making. It also demonstrates investment in the individual and contributes to retention. For many it will take the form of structured courses at fixed intervals through their careers. It should also allow individuals to follow their interests where they broadly coincide with those of the Service. This widens the Army's perspective as a whole and contributes to conceptual development. For some this may include higher academic degrees in external institutions; for others the chance to develop expertise within a chosen employment field. A professional army should invest beyond its immediate specialist requirements to produce an educated and mentally flexible organization. Armies who fail to make such investment in education risk operational failure, as the British Army did in the Crimea War. This can be compared to the successful experience of the well-educated Prussian Army in the Franco-Prussian War only a few years later.

0809. Battlefield tours and staff rides are similar but have different functions. A battlefield tour is concerned with looking at past operations for general interest. A staff ride concentrates on the analysis of operations rather than historical narrative. Its objectives are directly relevant to the formal military training of those concerned. In their original form, staff rides were designed as map exercises for the staff conducted largely from the saddle; hence the term 'staff ride'. Staff rides contribute to the development of the conceptual component and can:

a. Demonstrate the principles of war and the links between strategy, operational art and tactics.

b. Examine the realities of war and the human nature of conflict. This includes the study of command, leadership, morale and cohesion.

c. Illustrate the dynamics of battle in terms of time, space and forces, showing the effects of terrain and weather on the conduct of operations.

d. Provide a variety of case studies relating to aspects such as joint operations, combined arms tactics, logistics, civil-military relations and the battlefield effects of technology, training and doctrine.

e. Encourage personal professional development, offering an analytical framework for the systematic study of campaigns and battles.

f. Develop military skills such as decision-making and powers of intuition.

0810. Post-operational reports and observations from training should be written by subject-matter experts; usually military or former military personnel. They should be conducted with analytical rigour to identify important issues, describe their significance, indicate what action is required, and ensure that such action is undertaken. Furthermore, a robust and institutionalised lessons process should include a formal process of reviewing lessons, monitoring implementation, and resolving conflicts with policy or practice. Thoroughness and persistence are required. There is also a requirement for in-depth analysis of the operation to provide insight to improve the Army's understanding of conflict and how to operate within it. Such analyses should be conducted within the perspective of the operation as a whole and draw more wide-reaching conclusions than those which tend to arise from a structured lessons process.

0811. It has been said that there are very few new lessons, just old lessons forgotten. The difficulty lies in identifying those lessons from the mass of sources available from over four thousand years of recorded history. Military *historical research* helps to draw relevant lessons from history. Conversely *historical analysis* is a largely mathematical process of analysing historical operations and drawing statistical inferences. For example, historical analysis of ship movements suggested the adoption of the convoy system in the First World War which helped defeat the German submarine threat. Appropriate questions have to be asked, and the results interpreted appropriately, if the results of historical research and historical analysis are to be useful. Both require the involvement of trained and educated military personnel. Historians and statisticians cannot perform the whole process without military support and guidance.

0812. Operational analysis is scientific support to military decision-making. It applies scientific process and rigour to military problems, although military decisions should rest with military commanders. Operational analysis can support decision-making during operations through techniques such as course of action comparison, logistic anticipation, and casualty estimation. It also supports conceptual development, equipment procurement and defence policy. It can be used to generate statistics to support post-operational reports and observations from training. It looks forward; but typically applies data from previous conflicts to simulations of future operations. As with other aspects of research, development and analysis, military personnel should assist civilian scientific staff to ensure that military reality is taken into account.

The British/Indian Army (1942-1945)

In 1941 and 1942 the Imperial Japanese Army swept all before it. In three months it defeated the British/Indian Army in Burma, and drove it a thousand miles back into India: the longest retreat in British military history. Yet from this defeated force, limping back across the Chin Hills into Assam, rose an army that would later outmatch the Japanese in virtually every respect; and when in May 1945 the leading elements of the 17th and 26th Indian Divisions, 14th Army, met north of Rangoon, the British/Indian Army had inflicted the worst land defeat that the Imperial Japanese Army had ever suffered.

The British/Indian Army became so successful not just because of superior strategy, leadership, or operational art; but because it learnt from what it had done wrong. This was an army willing to learn; that analysed its mistakes; and changed rapidly. After defeat in 1942, it established that its main failing was in jungle tactics and training, mainly at low level. It developed new tactics, and the training required to make those tactics work. It also changed its organization, at army command, formation, and unit level. General Slim may have been the architect of success in the Burma Campaign, but he could do nothing without the tactical craftsmanship of the battalions under his command.

In the defeats of the 1st Burma Campaign in January to April 1942 and the 1st Arakan campaign of late 1942, some battalions were woefully unprepared to fight a jungle war: they had trained for the Middle East, and had lost many of their experienced officers and men to assist the expansion of the Army. When the Japanese attacked the British/Indian Army was road-bound; had no answer to Japanese enveloping tactics; did not dig in; adopted linear defences; and built positions that were not mutually supporting.

At first, there was no central organization to direct the process of change. Units learnt from their own experiences, or from lessons circulated at formation level. In June 1943 the Infantry Committee was established formally to analyze the lessons to date, and tactical development across the India Command was rationalized. Initially this was through a series of pamphlets and training manuals (such as the "Jungle Book"), subsequently complemented by a comprehensive training system. The Army gradually improved; mostly through trial and error. The chief element of success was continuous patrolling, supported by other critical tactics: all round defence; attack by infiltration (preferably in the flank or rear of the enemy); and digging slit trenches whenever troops halted. Supply systems were designed to support jungle fighting: mule trains to free battalions from roads; and aerial re-supply to permit units to accept Japanese envelopment and still hold and fight.

By 1945 these tactics were second nature to the British/Indian Army; they were supremely confident in their use, frequently beating Japanese forces even when significantly outnumbered. As George Macdonald Frazer said, in his memoir[1] as a Border Regiment JNCO in Burma, "the Army is fond of describing itself today as the Professionals; we weren't professionals – we were *experts*".

Drawn from Daniel P Marston, *Phoenix from the Ashes – the Indian Army in the Burma Campaign*. (London: Praegar, 2003)

[1] George MacDonald Frazer, *Quartered Safe Out Here*, (London: Harvill Press, 1992), p. 87.

0813. Experimentation can give insight into many operational problems and is an important aspect of operational analysis. Only large-scale exercises with troops can approximately replicate the complexity of combat and provide deep insight. However, unless they are conducted as rigorous experiments, conclusions drawn from them may be of limited value. The results of a properly-conducted experiment are not readily predictable and there is a possibility of failure. This can create tension in large-scale exercises between training and experimental objectives. Exercises dedicated to experimentation are an investment in the future and contribute significantly to conceptual development.

The Experimental Mechanised Force

Figure 8.1 – Major General Fuller (as a Colonel), 1919

Britain pioneered the use of tanks in the First World War. Their first major use was at Cambrai on 20 November 1917; an even more spectacular success was gained at Amiens on August 8th, 1918. After the drawdown at the end of the War, Britain established an Experimental Mechanised Force, based at Tidworth on Salisbury Plain, in 1927. Colonel J F C Fuller, formerly Chief of Staff of the Tank Corps, was invited to command it, but declined. Major trials were conducted in 1927, 1928, 1931 and 1934. All aspects of armoured warfare, including air-ground cooperation, were investigated and considerable experience was gained.

However, a change of Chief of the Imperial General Staff in February 1933 removed much of the British Army's support for the development of armoured forces. When the campaign in France opened in 1940, Britain could deploy only one properly-equipped Army Tank Brigade, intended primarily for infantry close support. The First Armoured Division, although in France, was incomplete. The Seventh Armoured Division was forming up in North Africa.

Unfortunately, the impact of the Experimental Mechanised Force on the German Army was far more marked. German observers attended the trials of 1931 and wrote reports which were published in military publications in Germany.

The German Army perceived that Britain had achieved a world-wide lead in armoured warfare and that the Germans must catch up. The first three Panzer Divisions were raised in 1933. Six fought in Poland in 1939 and ten were available in the West in 1940. Experimentation alone had proven insufficient. The necessary will and resources, lacking in the British Army, were found by the Germans and applied to considerable effect.

Taken from Anthony John Trythall, *'Boney' Fuller – the Intellectual General*. (London: Cassell, 1977)

The Physical Component

0814. This section describes the physical component of Fighting Power, consisting of ***manpower***, ***collective performance***, ***equipment*** and ***sustainability***.

0815. Manpower is the lifeblood of an Army and is provided through manning and recruiting processes. Who the Army recruits, how it employs them, and how it acts towards them in the first few weeks of their military careers all have an impact on their subsequent behaviour. There is a balance between the Army's ability to recruit the numbers it needs and the skills those people have or can be trained to hold. The higher the required standards, the smaller the pool from which they can be recruited.

0816. Once recruited, an individual is subject to a wide range of Service manpower policies that affect all aspects of his life and employment. They include leave, pay, promotion, discipline, welfare, employment, reports and appraisals, operational tour intervals, structures and career progression. The links between them are complex and they support a balance of sanction and reward aimed at producing motivated and trained personnel. The mix is generally robust and major problems rarely occur. However, in some circumstances small changes in policy or practice have

significant impact on certain trade groups, particularly where those groups are small. Also, since the Army exists within society as a whole, external changes can affect the Army's ability to attract and retain the people it needs. It is important to maintain aspirations for career development, provide for an acceptable quality of life for the soldier and his family, and manage operational tempo against the operational need.

0817. Resettlement and discharge contribute directly to Fighting Power through their impact on retention. A steady rate of discharge creates opportunities for promotion. Resettlement returns individuals to society with employable skills, improves the image of the Army as a good employer thus improving recruitment, and demonstrates to those who remain that they will be similarly valued on completion of their service.

0818. Manpower, equipment and organization are converted into deployable capability by training. *Initial training* forms a baseline capability and generates common understanding. *Collective training* forms trained individuals into cohesive formations and units, and broadens individual experience. As combat is complex, so are the skills required to conduct it. Such skills fade over time, both for individuals and units. Collective performance fades as individuals within units and formations forget, or move on. Training should therefore be individual and collective, progressive and frequent.

0819. A force cannot achieve high levels of readiness for operations until it has been exercised as a whole by an external organization or higher headquarters. An headquarters can either exercise its subordinates or train itself; but it cannot exercise itself effectively. For many reasons, large-scale field training exercises are the best form of collective training. For example, friction is difficult to replicate in other forms of training. Reconnaissance units should train with the formations for which they reconnoitre in order to ensure that the information they provide is timely and relevant. Logistic units cannot train effectively without the scale and the time demands imposed by the force they support. Units and subunits cannot practise combined-arms tactics properly outside a formation framework because regrouping between battlegroups can only take place at formation level. The use of simulators can provide a high degree of realism which may not be available by other means. Hence large-scale force-on-force field exercises using weapons effects simulators have very high value.

Figure 8.2 – Maintaining Battlefield Skills, Iraq War 2003

0820. Most military research, development and analysis provides scientific and technical support to equipment acquisition. This can last decades. For example, semiconductor material research in the 1960-70s produced the microprocessors needed for the information revolution of the 1980-90s which resulted in battlefield digital and networked systems. Military research, development and analysis should be driven by doctrine and concepts if they are to result in useable military systems, although new technology can create unanticipated opportunities. Those responsible for systems development should be broadly educated; having a deep knowledge of their own technical field, a broad knowledge of military requirements, and a sound knowledge of how to deploy systems to support or generate military capability.

0821. Equipment acquisition is the programmed acquisition of systems, which normally takes several years due to the cost and scale of capability management. This also exploits the durability of deployed systems. If a major equipment has a planned life of twenty years or more, several years can be spent researching, planning, designing and programming its successor. Changes to the threat, strategic posture or concepts can have significant impact on the need for systems in both the short and the long term.

0822. The Urgent Operational Requirement process is a more rapid form of acquisition of equipment or materiel. It enables equipment and material to be obtained quickly in response to a particular operation since it is not possible to procure all the equipment required for every possible contingency. A balance should be achieved. On one hand, money can be saved by not procuring equipment for all contingencies. Conversely, there is a risk that insufficient time may be available to develop, procure, deliver and train on that equipment prior to an operation.

Upgrading the Bazooka

During the Second World War the US Army employed the 2.75 inch rocket launcher (RL) as a short-range antitank weapon, with reasonable success. It was popularly known as the 'Bazooka'. However, when US forces deployed to Korea in 1950 they came across Soviet tanks for the first time – particularly the well-protected T34. The 2.75 inch RL was found to be inadequate.

The US armaments system rolled into action. Analysis suggested that the easiest solution would be to simply scale up the 2.75 in RL. Not least, this would avoid having to re-train the operators. The new model, the 3.5in RL, looked almost identical but was actually about 25% bigger all round. The new Bazooka was rushed into production and shipped across the Pacific to Korea. The first examples were with front line troops 88 days after the problem was identified. The new weapon was entirely adequate for the job for which it was required.

Drawn from Maurice Mitloff ed. *American Military History* (Washington: US Army & Government Printing Office, 1973)

0823. Like equipment, the procurement of military materiel such as protective equipment and medical supplies involves considerable investment and long timescales. Most commodities have a finite shelf-life and it is expensive to maintain them in large quantities for possible future operations. Many are also not easy to procure, often requiring specialist factories and relatively long lead-times. Some items such as artillery ammunition are required in much greater quantities for major combat operations than for other types of operation. Thus large amounts may be required at relatively short notice; but they are expensive, heavy, bulky and need special handling. Estimating quantities required is a balance of cost against the risk of operational failure.

The Moral Component

0824. The importance of cohesion was described in Chapters 2 and 7. Moral cohesion is a largely intangible product of force preparation and generation. It is built over time, reflecting issues such as unit ethos, tradition, and shared experience. A failure to build or sustain such cohesion will result in demoralization, loss of will and tactical failure.

0825. Barrack life forms a significant proportion of a soldier's or officer's military experience. It is affected by general manpower policies and many small issues that are largely a result of experience and tradition. The precise particulars are rarely important of themselves. There should be a balance between tradition and custom on the one hand and operational relevance on the other, all aimed at generating moral cohesion through shared experience.

0826. Scientific research and development analyse social, psychological and demographic as well as technical issues. Studying the behavioural human sciences assists issues such as: understanding the sources of potential recruits; developing concepts for Information Operations; and developing operational concepts. Although behavioural aspects underpin the moral component of Fighting Power, few serving personnel have qualifications in these disciplines and the Army's knowledge of such issues is largely implicit.

8.3 The Path to Force Generation

0827. From the individual's perspective, the path to force generation begins when he is initially attracted to the Army. He is recruited and undergoes initial entry training as a soldier or officer. He then joins a unit, which is at some point within a readiness process. His unit, and the formation it belongs to, undertakes general *force preparation* activities until warned for operations. To him, these activities focus on individual and collective training, and equipment husbandry. Training should be progressive, from individual and team training to large scale exercises. Low-level training is typically single-Service, becoming increasingly joint and multinational training at higher levels. As his unit switches to *force generation*, activities become more focused on the particular operation to be undertaken. 'Mission preparation' describes preparation for a task in general; 'mission rehearsal' refers to preparation for a specified mission in a given operation.

0828. Force generation activities should not stop as the operation commences. Refresher training should take place during quiet periods. There should be an effective mechanism which continuously captures and considers lessons from both operations and training. Concurrently, other forces should undergo force generation so as to relieve those deployed in due course. Activities such as recovery from theatre, leave and equipment refurbishment should follow. Individuals, units and formations should then continue with the ongoing process of force preparation. Lessons should be disseminated to develop understanding and contribute to conceptual development. Some individuals leave the Service and are replaced with newly-trained recruits. Promotions and postings continue; equipment will be upgraded or withdrawn from service; new equipment will be brought into service.

0829. The path to force preparation and generation is unending; all the activities listed in the previous section contribute along that path. Policies and procedures for recruitment, retention and training impact directly on the individual soldier. His equipment needs to be designed, built, accepted into service, supported, maintained and eventually disposed of. The material he consumes – including ammunition, rations and fuel – also has to be acquired, stored, maintained and supplied. The training he undertakes needs to be scheduled, planned, resourced and conducted.

The size and shape of the units and formations of which he is a member need to be planned, developed and evolved. There are many other examples and very large numbers of people are involved. Many are members of the Armed Forces; some are civil servants; others are in industry. In some cases the activities they undertake will be reflected rapidly in operational capability; such activities include acquiring equipment against Urgent Operational Requirements. In other cases, such as routine equipment acquisition, the results may only be fielded after years or even decades.

0830. Force preparation and generation should use feedback processes to maximize Fighting Power. Such feedback includes post-operational reports and observations from training. The benefit arises only when lessons and observations are acted upon and practices changed. The way an army learns from its experience is a true measure of its professionalism.

HALLOWE'EN 1914

The all-Regular British Expeditionary Force mobilized on August 4th, 1914 and was soon in action in France. It took significant casualties in the opening battles of August, September and October 1914. The Territorial Army was not intended for operations outside the UK, but by October twenty-two TA Battalions had been mobilized and despatched to France. The first Territorial unit – the London Scottish (14th Battalion, the London Regiment) entered the front line to reinforce the Second Cavalry Division near Messines on Hallowe'en, 31st October. Others followed quickly. By coincidence, when the Third Infantry Division relieved the Second Cavalry Division it contained the Liverpool Scottish (10th Battalion, the King's Regiment). 21 Territorial battalions and five Yeomanry regiments qualified for the Mons Star. The 'Old Contemptibles' were by no means entirely Regulars.

The 'Kitchener Armies' did not start to arrive in France until 1915; the breach was largely filled by pre-war TA battalions. Many were 'doubled' – split and enlarged in to two, and sometimes three, battalions. The quality of pre-war TA soldiers was often very high. Units such as the London and Liverpool Scottish and the Artists Rifles (28th Battalion, the London Regiment) produced a very large number of officers: the Liverpool Scottish alone commissioned about 480 officers from its ranks. One rose to the rank of major general; one became a fighter ace in the Royal Flying Corps; another was the future Marshal of the Royal Air Force, Trafford Leigh-Mallory. Its RMO, Captain Noel Chavasse RAMC, was the only person to be awarded the Victoria Cross twice in the First World War.

Drawn from Robin Neillands *The Old Contemptibles – The British Expeditionary Force*, 1914. (London: Hodder Headline, 2004)
and Hal Giblin et al, Bravest of Hearts – The Biography of a Battalion. The Liverpool Scottish in the Great War. (Merseyside: Winordie Publications, 2000)

0831. The Reserves can make a major contribution to land forces on operations. Properly preparing the Reserves, which includes their recruitment, training and conditions of service, is a key requirement. All individuals, whether reserve or regular, should be deployed for operations only when they have completed initial training, trade training and special-to-theatre training, and have *demonstrated* adequate levels of the skills required.

0832. Since friction affects all operations, force preparation and generation should simulate that friction in order to prepare land forces to overcome it. Large-scale field training exercises permit realistic simulation of friction, although not to the extent it exists on operations. Such exercises allow current operational concepts, as described in doctrine, to be tested against the contemporary operating environment. Aspects of that environment may be physical: Exercise SAIF SAREEA II in 2001 drew lessons on operating in the desert, in part forgotten since the 1991 Gulf War but remembered in time for the 2003 Iraq War. Other aspects of the environment are geopolitical. For

example, the tactics used by British forces in 2003 generally predated the events of 11 September 2001 and were judged to be largely valid. However, the context in which they were applied had changed. For example, the threat to personnel and equipment in rear areas had grown.[1] All members of the Army should be soldiers first and specialists second. Training and equipment scales should reflect that necessity.

0833. National differences in structures, systems and doctrine suggest that regular multinational exercises should be held. However, such exercises contribute only to force preparation rather than generation because the precise makeup of a future coalition force cannot be predicted. This places considerable importance on the process of observing such exercises, recording observations, and deriving lessons so as to develop standardized procedures to be adopted for future coalition operations.

[1] The term 'rear areas' remains meaningful in terms of the location from which forces are sustained. See Chapter 3, paragraph 0331.

ESSAY

DOCTRINE AND COMMAND IN THE BRITISH ARMY: AN HISTORICAL OVERVIEW

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Introduction

While some armed forces have been famed for their doctrinal approach, until 1989 the British Army was not one of them. Largely eschewing formal, written doctrine, the Army made a cult of pragmatism, flexibility and an empirical approach, the latter defined by the Oxford English Dictionary as 'based or acting on observation or experiment, not on theory; deriving knowledge from experience alone'. That is not to say that the British Army entirely neglected 'doctrine', broadly defined, in the nineteenth and twentieth centuries. However, doctrine tended to be semi-formal at best; was centred around one individual commander or existed in a specific set of circumstances (usually high-intensity war) and was not necessarily easily transferable elsewhere; and in some cases it was more honoured in the breach than the observance. The reinvention of the British Army since 1989 as a doctrinally based organization is as profound a revolution as any experienced in its 350-year history.

Military doctrine means different things to different people and organizations. The Army's first modern doctrinal pamphlet, the 1989 'Design for Military Operations' defined it as 'that what is taught'. Rather more helpfully, NATO defines doctrine as 'fundamental principles by which military forces guide their actions in support of objectives. It is authoritative, but requires judgement in application'. British Defence Doctrine states that the 'principal purpose of military doctrine… is to provide the Armed Forces with a framework of guidance for the conduct of operations'. Two blinding glimpses of the obvious may be mentioned here. First, doctrine is not intended as a substitute for thought. Second, if an army's doctrine is flawed, that can be worse than having no doctrine at all. Changing an army's doctrine in the middle of a major war is a difficult and dangerous process.

This essay will employ the military thinker J F C Fuller's 1923 definition of doctrine as the 'central idea of an army'. This has the virtue of simplicity and brevity, and also of being broad enough to encompass the wide varieties of 'doctrine' that have influenced the British Army over the last century or so. Fuller went on to amplify his definition of doctrine, arguing that

> to be sound [it] must be based on the principles of war, and which to be effective must be elastic enough to admit of mutation in accordance with change in circumstance. In its ultimate relationship to the human understanding this central idea or doctrine is nothing else than common sense – that is, action adapted to circumstances.[1]

The relationship between military thought and doctrine is complex. They are not synonymous, although clearly the first can influence the second. In the case of counter-insurgency, the ideas promulgated by military thinkers played a significant role in the formulation of a semi-formal doctrine. Ultimately, unofficial military thought, such as that produced by Basil Liddell Hart and J F C Fuller in the first half of the twentieth century, or Richard Simpkin in the 1970s and 1980s, can be accepted or rejected by officers according to their taste. Formal doctrine, if the system works properly, cannot. Rather, doctrine

> should establish a framework of understanding and action, which should inform the decision-making process. Doctrine at the higher levels should permeate the language and thinking of those in high command, and their subordinates should be able to gauge their thoughts, and indeed, anticipate them because of a common background and training.[2]

Doctrine can be disseminated in many ways: through formal publications; unofficial books and articles; teaching at military colleges; lectures to bodies such as the Royal United Services Institute; by senior commanders establishing informal 'schools' of disciples; and by hard-won experience being passed on informally at regimental level. For most of its existence, the British Army has relied primarily on informal rather than formal methods of disseminating doctrine. This was a consequence of the historic structure of the British Army, as a loose federation of individual regiments and corps, which inhibited the imposition of ideas from on high. While the importance of the regimental system in retarding the acceptance of doctrine can be overestimated, it was certainly a factor, reflecting a trend in wider British society of empiricism and suspicion of theory. The British Army officer corps has traditionally been characterized by the ethos of the gentlemanly amateur. Soldiers who took their profession seriously were likely to be regarded as a little odd, and some – such as Bernard Montgomery – as 'military s***s'.

Lack of doctrine was also a manifestation of the political context within which the Army has operated. It is conceivable that a reform minded government could have forced the acceptance of Army-wide doctrine, but the general attitude has been one of benign – or sometimes not so benign – neglect. General Sir Mike Jackson's comment that 'Political guidance can be really helpful if you get it' would have been echoed by many of his predecessors down the centuries.[3] In the period immediately before the Second World War, for instance, the government only made a formal decision to send an expeditionary force to the Continent in early 1939, which left little time to prepare the Army for its new role. Moreover, one might defend the Army's lack of intellectual readiness for the type of high intensity war that it was to fight between 1939 and 1945 by arguing that in the absence of strategic direction, it was only natural that officers should concentrate on the type of conflict in which they were most likely to engage – colonial small wars. Operating more often that not in a political vacuum, for much of its history, the Army has simply got on with what it is good at: fighting small wars, which gave full rein to the units exercising the virtues of flexibility, pragmatism, and working out each problem as it came along.

The absence of joint doctrine has caused problems over the years. During periods of close cooperation, for example between the Army and the Royal Navy (RN) during the Napoleonic Wars, each service came to understand the other's perspective and requirements, and an effective partnership could be forged. But this was dependent on two variables. First, that the mix of personalities was right. The role of personalities should never be underestimated, but effective doctrine can help ameliorate its more dangerous aspects, and conversely individuals who forge a good working relationship can help to overcome the problems posed by a lack of common doctrine. Second, it is all too easy for experience gained through constant practice to be lost if individuals, or circumstances, change. The relationship of the Army and the Royal Air Force (RAF) is a case in point. Until April 1918, the Royal Flying Corps was part of the Army, and was largely dedicated to supporting the land battle, thanks in part to the fact that Trenchard, Haig's Air Component Commander (to use a modern term), shared the C-in-C's strategic vision. After the First World War, a vast gulf opened between the Army and the newly-independent RAF. The 'central idea' of the RAF under, ironically, Trenchard, became strategic bombing, and Army cooperation became the light blue Cinderella. The lessons of land-air cooperation learned so painfully on the Western Front had to be relearned, equally painfully, during the Second World War.

Colonial Warfare to Counter-Insurgency to Peace Support Operations

British counter-insurgency (COIN) practice admirably demonstrates both the existence of a body of semi-formal doctrine, and the way in which it was disseminated. During the nineteenth and twentieth centuries the British Army acquired a vast amount of experience in 'small wars', first in colonial campaigns and then, after 1945, during the retreat from empire. There was no systematic attempt to produce a formal doctrine in the modern sense for small wars – such a thing would have run counter to the ethos and practice of the Army at that time. However, a body of unofficial but nonetheless influential writings was produced, which, along with teaching at military colleges such as Camberley and Quetta, and, most important of all, the passing on of experience by individuals, something approximating to a 'central idea of an Army' did emerge in the form of a number of basic principles that were generally recognized as effective, to which troops facing insurgency usually adhered.

These included the use of minimum necessary force, the use of local resources, and the gathering of intelligence, as well as a basic recognition that unrest was usually rooted in a political grievance, and that political reform could be an appropriate response. Underpinning this doctrine was a highly pragmatic approach to problem solving, to which flexibility was the key. This doctrine was certainly not a rigid template, and the principles were certainly breached on occasions, most famously at Amritsar in India (April 1919), when 380 demonstrators were killed.

The experience of colonial campaigning was codified by C E Callwell in *Small Wars: Their Principles and Practice* in 1896 and other writers produced books along similar lines. Some tactical pamphlets were produced with titles such as *Notes on Imperial Policing* (1934) and *Duties in Aid of the Civil Power* (1937). These contained strict instructions for use of military forces, for it became standard practice for the Army to be called in by the civil authorities only if the police could not handle the situation. The military commander usually remained subordinated to the civil authorities, unless martial law was proclaimed. The use of minimum force emerged as an ideal, stressed by Sir Charles Gwynn in his book *Imperial Policing* (1934) – an unofficial text, but which was nonetheless widely used at the Staff College, Camberley.

How many officers actually read, and even more importantly, internalized these works is a moot point. Probably more important was the dissemination of knowledge at regimental level, with old hands passing on the wisdom gained from hard experience to newcomers. Similarly, senior commanders would carry ideas and methods from campaign to campaign, which would act as a form of localized, *de facto* doctrine, if only while he remained in command. Indeed, one scholar has referred to 'historical amnesia' which suggests that the British approach in this period 'was a matter of broad principles transmitted informally from one generation of soldiers and civil servants to the next'.[4]

After 1945 the British Army followed a similar route, relying on best practice being passed on by regimental osmosis, backed up by official tactical manuals and some unofficial but influential writings. The colonial warfare experience proved a firm basis on which to base COIN in the post-1945 era, with tried and tested methods being added to an enhanced understanding of the political/ideological dimension. However, the concentration on conventional warfare during the Second World War meant that a certain amount of reinvention of the wheel had to be carried out in the late 1940s and early 1950s.

This produced a form of doctrine that although still semi-formal, was even more pervasive than its pre 1939 ancestor had been. The formative experiences were the campaigns in Palestine (1945-8) and Malaya (1948-60). Out of these, and other campaigns, emerged 'a distinctive pattern of counter-insurgency… [not] a theory, elaborately complied and rigidly adhered to… but a series of responses which, when adapted to fit specific conditions, proved success in maintaining at least a measure of political stability, even under the pressure of strident nationalism of communist revolutionary warfare'.[5]

This semi-formal doctrine had the virtue of flexibility, in that it could be adapted to suit very different circumstances. This was not always successful. The expedient of uniting civil and military authority in the person of one individual – Sir Gerald Templer who served as both High Commissioner and Director of Military Operations in Malaya in 1952 to 1954 – was less successful when Field Marshal Harding carried out a similar role in Cyprus. Moreover, COIN principles were also on occasions inconsistently applied. The British Army's approach to operations in Northern Ireland in the early 1970s sometimes departed from the principles of COIN that had emerged painfully over previous years.

Nevertheless, certain broad principles can be identified as threads running through British COIN campaigns, including identification of the essentially political nature of the problem, the primacy of civil control, the coordination of civil and military activity, the emphasis on intelligence, the separation of the insurgent from the mass of the people, the battle to win 'hearts and minds', appropriate and proportionate military response and political reform to prevent a resurgence of the problem.

Just as in earlier years, the British writings on COIN did not enjoy 'official' status, but were nonetheless regarded as significant within the Army. Probably the most celebrated were the works of Sir Robert Thompson (such as *Countering Communist Insurgency,* 1966). His 'five principles' laid heavy stress on political responses, and reflected his experience of the Malayan Emergency, in which he participated as a high level administrator. There was another writer whose influence rivalled Thompson: Frank Kitson, who served in the counter-insurgencies in Kenya, Muscat and Oman, and Cyprus. He commanded in Belfast at the height of the Troubles in 1970-2, and was Commandant at the Staff College in 1978-80. His books (*Gangs and Countergangs,* 1960*; Low Intensity Operations,* 1969; *Bunch of Five*, 1977) were broadly similar to Thompson's, although he placed especial emphasis on intelligence. The COIN era also produced some official manuals, the *Conduct of Anti-Terrorist Operations in Malaya (ATOM*) pamphlet being a particularly significant example, which was, interestingly, published by the government of Malaya rather than the Army.

In the early years of the COIN era, Sandhurst and the Staff College played a fairly minor role in passing on doctrine. It was not until the early 1960s that relevant material formed a significant part of the curriculum at RMAS, and much the same appears to have been true at Camberley. From the 1970s onwards, things improved, with periods being devoted to COIN at both institutions. At Sandhurst, students were exposed to some quite sophisticated discussions of COIN, albeit briefly. John Pimlott, who taught at RMAS from 1973 to his death in 1997, was a particularly influential figure. Regularly lecturing on the subject, he played an important role in codifying British COIN principles, and passing on their essence to generations of student officers. He also had an influence on the first formal British COIN doctrine, which appeared in the 1990s.

The semi-formal COIN doctrine was the product of a very British approach to problem-solving, based on empiricism rather than theory. As Thomas Mockaitis has written of the pre-1960 period, while the British approach to COIN was 'distinctly different from that of other nations',

> Each campaign was approached on a more or less *ad hoc* basis, according to the general principles of minimum force, civil-military cooperation and tactical flexibility. Asked to explain their methods, officers often referred to them as 'common sense' or 'making it up as we went along'… the [military] establishment [was] singularly resistant to preserving and transmitting its experience in an orderly fashion. Fortunately, an almost unbroken string of internal security missions allowed effective methods and principles to develop and be passed along informally'.[6]

The argument that the Army was resistant to formal doctrine is at first sight supported by the reaction to the introduction of *Wider Peacekeeping (WPK)*, a controversial doctrinal work published in 1994.[7] Possibly, however, perceived flaws in the doctrine were more important than opposition to doctrine *per se*. The background was the commitment of British troops to Bosnia from September 1992 onwards. It is clear that British commanders felt that the Army's experience of COIN and peacekeeping were more than adequate preparation for dealing with the 'complex emergency' in former Yugoslavia. Brigadier Andrew Cumming, for instance, commented that:

> Both our doctrine and education and, most importantly, our officers and soldiers are good enough to adapt to any change of role or circumstances to achieve the best results.

WPK laid stress on impartiality and consent as absolutes. Critics of *WPK* saw it as overly timid, and risk averse. Such criticisms reflected wider unhappiness with what some perceived as the Army's excessively passive role in Bosnia. Rod Thornton sees *WPK* as a 'political' document that 'served the Army's need to advertise to a wider world why it acted the way it did in Bosnia'[8]. It was replaced by *Joint Warfare Publication 3-50, Peace Support Operations* in 1997, which was influenced by the changed strategic environment in Bosnia. This was a doctrine for peace enforcement that envisaged the Army being used in a much more robust fashion than in the early stages of the intervention in Bosnia. *JWP 3-50* drew on the essentials of COIN, and recognized that 'judicious' use of force might be beneficial. In the words of one of its authors, 'The approach that JWP 3-50 offers is based upon a combination of enforcement and consent promoting techniques – a combination of the stick and carrot.' [9]

Several conclusions can be drawn from the *WPK* saga. The first is that the British Army's tradition of empiricism and flexibility continued to be important into the post-1989 doctrinal era. The second was that a specific piece of doctrine caused considerable controversy – something that, for good or ill, was largely avoided during the pre-doctrine era. Finally, the semi-formal British COIN doctrine proved a firm basis for the construction of doctrine for Peace Support Operations. In the last years of the twentieth century and the first years of the twenty-first, the British Army has been engaged in a number of complex operations, for example in Kosovo and Iraq, in which elements of COIN and Peace Support (and sometimes conventional warfighting) have existed side by side. In these operations British troops have employed the traditional approach of flexibility and pragmatism, but now it is buttressed by doctrine which provides a framework for thought and decision-making.

The First World War

The British Army of the First World War has had a bad press. Any attempt to assess the British commanders and the way they conducted operations has to get past a series of tired stereotypes. The popular image is of 'lions led by donkeys'. Baffled by trench warfare, it is commonly believed the generals (who were unimaginative at best and downright stupid at worst) could think of nothing better than to throwing ever more men into battles of attrition. Some historians, while moving far

beyond such overly simplistic views, have also taken a dim view of the British Army. It has been portrayed as inflexible, overly conservative, addicted to the offensive, wedded to manpower-centred, methods of warfighting, exalting morale over technology, and seeing sheer mass of men and shells as the key to victory. It has also been criticized for its lack of a coherent doctrine, and compared unfavourably with the innovative, doctrinally-based German Army. One wonders, if the critics are correct, how it came about that the British Army won the First World War, and the German Army lost it.

The truth is rather different. Overcoming enormous problems, between 1914 and 1918 the British Army transformed itself from a colonial gendarmerie into a continental-sized army. In 1918 this Army took the lead in defeating the German Army on the field of battle, winning the greatest series of military victories in British history. In order to achieve this success, the Army had to overcome the problems of expansion, from 6 divisions on the Western Front in 1914 to about 60 two years later. The small Regular Army became a vast citizen force of volunteers and, later, conscripts. To provide commanders and staffs for these formations meant rapid promotion and officers having to learn how to handle greatly expanded responsibilities. This was on the job training with a vengeance, as all too often it took place while in contact with the enemy. This all took place at a time when, as Major General Jonathan Bailey has demonstrated, profound changes in the conduct of war were occurring, which amounted to a Revolution in Military Affairs. The wonder is not that mistakes with bloody consequences occurred, but rather that given such an unpromising beginning, the Army reached such a peak of military excellence.

The British Army went through the First World War without a formal doctrine in the modern sense. Indeed, senor officers had deliberately rejected the notion of adopting prescriptive doctrine, seeing it as likely to hamper the exercise of initiative and flexibility. In 1911, an article in a professional journal concerning the updated version of *Infantry Training* stated that 'considerable latitude in applying principles and instructions to local conditions have been left to commanders' – an important consideration given that British troops were likely to have to fight in very different circumstances all over the globe.[10]

The Army did, however, have a body of doctrine in the form of *Field Service Regulations (FSR).* Rather than being prescriptive, *FSR* set out broad principles for action. General *S*ir Douglas Haig was the key figure in the formulation of *FSR 1909.* Under his direction, *FSR 1909* included the lessons that he had learned from his time as a Staff College student in 1896 that battles fell into four stages: the advance to contact; the establishment of the firing line, in which the British would achieve fire superiority; the assault; and the pursuit. These stages in the battle had, Haig declared in 1917, 'proved successful in war from time immemorial'. The aim was 'the quickest and most complete destruction of the enemy forces' which would deliver 'decisive success'. As Albert Palazzo has written, although the British 'concept of battle' was based on a much smaller scale of conflict than the one they found themselves engaged in on the Western Front, 'since the principles were believed to be timeless they did not require any change or modification. Instead it was simply the scale of the engagement that had to be adjusted…'[11] Senior commanders saw trench warfare as an aberration from the norm. Seen in the longer perspective of the development of warfare, they were right; mobile or semi-mobile warfare became once again the norm by the spring of 1918. Because the principles were so broad, they allowed commanders to exercise the pragmatism, flexibility and empiricism that the pre-war Regular Army cherished, and which resulted in much successful innovation.

Some writers have shied away from describing *FSR* as a doctrine. Certainly, the principles it contained were much broader than the semi-formal doctrine for COIN, although *FSR* was more formal and 'official'. It can nonetheless be fairly described as the 'central idea of an army'. There

was much emphasis on moral factors in *FSR.* 'Success in war depends more on moral than on physical qualities', stated *FSR 1912*; 'Neither armies, armament, resources, nor skill can compensate for lack of courage, energy, determination, and the bold offensive spirit which springs from a national determination to conquer. The development of the necessary moral qualities is, therefore, the first object to be attained in the training of an army.' Such statements echo thought in other European armies, and taken to extremes, as for instance in France, leading to the disastrous cult of the offensive of 1914. The emphasis on maintaining the Army's morale, and destroying that of the enemy, underpinned the British style of warfighting on the Western Front. If morale was the first plank of British doctrine, manoeuvre and firepower were the other two, reflected in the development of the tank, aircraft, infantry tactics, and above all, artillery techniques.

By painful trial and error, between 1915 and 1918 the British Army evolved a coherent method of warfighting. This involved the adoption of technology, the codification of tactics, and the establishment of an Army-wide training organization. By late 1917 a distinctly British style of warfighting had emerged, based around the all-arms 'weapons system', artillery heavy 'bite and hold' operations, and the use of technology as a substitute for numbers. It would be foolish to deny the weaknesses displayed (for example, a tendency for rigidity in command systems and over-control from the top, at least in the middle years of the war), the problems experienced, and mistakes made. It would be equally wrong to deny the success achieved by these methods in the Hundred Days of victories, August-November 1918.

The British Army's continued adherence to pre-war principles has been seen by many as an example of military myopia and pigheadedness. Certainly, looking at the horrific casualty lists and the failure of many British offensives, it seems that such critics have a point. This is to misunderstand the nature of the problem. All armies found themselves having to adjust to trench warfare, a form of conflict the realities of which had been only dimly perceived before the war, and for the reasons given above the British Army had particular handicaps to overcome. The British doctrine provided a framework within which tactical solutions could be sought. It was not perfect: while achieving fire dominance was critical to the British victories in 1917-18, in the last days of the war, when mobile operations had been resumed, a full-blown cavalry-based pursuit eluded the British Army, much to Haig's frustration. It is possible, but unlikely, that had the Army entered the war with a different doctrine, it would have proved more successful. Bill Slim, who unlike Haig has a firm place in the pantheon of great operational commanders, wrote of the battle of Imphal in Burma in 1944 in remarkably similar terms to Haig's principles. Above all, it is difficult to argue with success. The German Army changed its doctrine in the course of the war, and it did not lead to victory. Indeed, a strong case can be made that it hastened its defeat. The British, who maintained the same doctrine throughout, ended the war as masters of the battlefield.

Between the Two World Wars

The huge and effective army that Britain possessed at the end of the First World War was rapidly demobilized and dispersed. The end of the war against Germany did not mean an end to fighting. The Army was committed to a myriad of small wars and police actions: in various parts of the Empire, newly-enlarged with the acquisition of territory from their former enemies; in Ireland; and in Russia, where British and other forces intervened against the Bolsheviks. This rapid return to the small change of British soldiering had an important impact, as it denied the Army any breathing space for the leisurely examination and analysis of its Great War experience. Soldiers were too busy soldiering.

Moreover, in a strategic situation that resembled that of the early twenty-first century, there was

no obvious conventional enemy on the horizon, so it is not surprising if soldiers tended to concentrate primarily on the COIN campaigns that were their immediate problems. Certainly, politicians showed little inclination to think about the possible role of the Army in a future major war, still less to direct the Chief of the Imperial General Staff (CIGS) to prepare for one. The general view of the First World War, shared by politicians, soldiers and the civilian population alike, can be summed up in two words: 'Never Again'. Almost anything, especially appeasement and strategic bombing – was seen as preferable to repetition of the Western Front.

On top of this, the interwar years were a period of tight budgets. The 'Ten Year Rule', by which planning was to be made on the assumption that there would be no major war for ten years, was introduced in 1919 by Winston Churchill, largely as an economy measure. The introduction of new equipment, and even carrying out training, was circumscribed by financial considerations. After the Royal Air Force and the Royal Navy had taken their slices of the defence budget, the Army usually was left with the crumbs. Budgetary decisions taken in the 1920s and 1930s were high on the list of reasons for ill-preparedness of the British Army in 1940.

The popular view of the higher reaches of the Army in the interwar period is of an intellectual wasteland, devoid of official military thought. The lessons of the Great War were not analysed until it was too late; and the prophetic utterings of a few visionaries such as Basil Liddell Hart and J.F.C. Fuller where ignored by the dinosaurs at the top of the Army. This led inexorably to the defeat in France in 1940. This portrait of the interwar scene, fostered by the self-serving writings of military critics such as Fuller and Liddell Hart, is little more than a caricature. In reality, under successive CIGS, senior soldiers wrestled with the lessons of the First World War, reformed the army, and formulated doctrine. At a lower level, a perusal of the pages of the *Journal of the Royal United Services Institute* or *Army Quarterly* reveals many articles written by officers of all ranks that analyse aspects of the Western (and other) fronts. Reform may not have moved fast or far enough for the taste of some military radicals, but that is not to say that reform did not occur. In this period, Liddell Hart and Fuller produced important and stimulating military theory; but their contribution comes under the heading of military thought rather than the subject of this essay, military doctrine (although they may have exerted some influence on the latter).

To a far greater extent than before 1914, senior officers recognized the importance of doctrine. The 1920 edition of *FSR Vol. II (Operations)* contained this blunt statement in the very first paragraph:

> The Army will be trained in peace and led in war in accordance with the doctrine contained in this volume. The principles of this doctrine should be so thoroughly impressed on the mind of every commander that, whenever he has to come to a decision in the field, he will instinctively give them their full weight.[12]

This emphasis on a 'universal', Army-wide doctrine continued throughout the interwar period. Two obstacles stood in the way of the British Army of the 1920s and 1930s becoming a doctrinally based service in the modern sense. First, although successive versions of *FSR* contained much good sense, they were closer to the pre-1914 semi-formal style of doctrine than the modern, more prescriptive variety. Second, the host of factors referred to above – the regimental system, leading to a lack of inter-arm cooperation; the dispersion of the Army in colonial garrisons across the globe; suspicion of doctrine; anti-intellectualism; adherence to the empirical tradition – prevented *FSR* being thoroughly internalized, and truly becoming the central idea of the British Army. The *FSR* of 1935, largely written by Archibald Wavell, was a fundamentally sound document.[13] Nevertheless, during the Desert campaigns of 1941 and early 1942, it was largely ignored (ironically,

by forces under Wavell's ultimate command) in favour of a locally improvised 'doctrine'. This stressed unsupported actions by tanks, and neglected the importance of the combined arms battle. Such an approach led, all too often, to disaster.

The assessment of the lessons of the Great War and the construction of a new doctrine began immediately after the War. The CIGS, Sir Henry Wilson, was determined that the Army should in future fight a mobile rather than a static war, and so invested in tanks. Over the next two decades horses were phased out, to be replaced by motor transport and tanks; permanent armoured formations were established; and the Bren light machine gun replaced the Lewis Gun of Western Front vintage. Various trials were carried out, most famously the establishment of the brigade-sized Experimental Mechanised Force in 1927-28. As a result, the Field Force sent to France in 1939 was the most highly mechanized army in the world. Doctrine was essentially sound, being based around the all arms battle, with the lessons of the Great War incorporated in *FSR 1935* via the Kirke report of 1932. *FSR* stressed the importance of high morale, surprise, and superior firepower. Attrition was to be avoided. In short, in David French's words, 'The very last thing the army was equipped, organized or trained to do was to repeat the trench warfare of the Western Front'.[14]

Nevertheless, several grave flaws can be identified in British doctrine at the outbreak of the Second World War. The Kirke report on the lessons of the First World War – striving to prevent trench deadlock – had identified that 'our methods are apt to be too stereotyped, which again tends to produce the same weakness in our methods of attack'. One solution was to move towards what we would today refer to as Mission Command:

> In mobile operations, however, precise orders cannot be issued to meet every possibility, and commanders will have to act on general instructions. All commanders should, therefore, be trained to work at times on instructions, and not to rigid orders.

The problem was that this laudable aspiration remained just that – an aspiration. Rigidity of command and the culture of the interwar army militated against developing the type of qualities of independent thought in officers, although those who had seen extensive active service in small wars tended to buck this trend. Moreover, there was a tendency to see operations in the terms of 1918, of set-piece advances of perhaps 40 miles, rather than the mobile battles being contemplated by the British Army's counterparts in Germany and the Soviet Union. This led to British soldiers being, on the whole, ill-prepared for the type of fast moving battle they encountered in 1940.

A further hazardous consequence of this line of thought was reinforced by the theories of Fuller and Liddell Hart. They assumed, and many agreed with them, that in future war the great artillery bombardments of 1916-17, that had sacrificed surprise and smashed communications rendering movement all but impossible, would be unnecessary. The Kirke report concludes cautiously – and significantly: "This question of speeding up the organization of artillery fire plans has been closely studied but so far the results have not been very encouraging." The solution in the 1930s was the decentralization of artillery command systems, which resulted, especially in the Desert campaigns of 1941 and early 1942, in an inability to concentrate artillery fire at the decisive point.[15] Under Haig, artillery had been the Army's most technically advanced arm, a true battle-winner. Under Montgomery, it was to become so again. In the meantime, there was a dangerous gap in the Army's doctrine.

In 1918, the British had conducted a highly effective form of air/land battle. Partly because of

institutional pressures that stemmed from the independent Royal Air Force's struggle for survival, the battlefield role of airpower was neglected in the interwar years. Strategic bombing became, for the RAF, the Holy Grail. *FSR* could not rely on having aircraft in the ground support role, and Kirke had airpower excluded from his remit; he could only suggest the desirability of aircraft as part of the larger package. The British Army was to pay the price for this neglect time and again during the Second World War.

The Second World War

The British Army's first major victory of the Second World War, O'Connor's defeat of the Italian Tenth Army in 1940-1, demonstrated the essential soundness of its pre-war doctrine. O'Connor's methods, which involved a surprise attack using all-arms, followed by a dash through the Desert to outflank the Italians and cut their line of retreat, were based not on the theories of the armour radicals but on common sense. However, O'Connor was captured in early 1941, and things were rather different under his successors.

Willingness to undertake radical experiments with armour rather than building on the sound foundations of *FSR 1935* was a self-inflicted wound. In 1941, it appeared that the German blitzkrieg had transformed the nature of warfare; and that the future lay with the tank. The terrain in the Western Desert encouraged a false analogy with war at sea. In this environment, the classic principles of war no longer seemed relevant, for the tank had seemingly created new ones. Accordingly, armoured commanders, influenced by radical thinkers such as Basil Liddell Hart, improvised new tactics, which had the fatal flaw of neglecting the coordination of all arms. Armoured units in particular were prone to try to fight independent battles. This was especially unfortunate given the propensity of some units for the frontal charge and the German tactic of using panzers to lure British tanks onto their anti-tank guns. Frequent changes of commander and units within Eighth Army did not make the task of establishing a sensible coherent doctrine any easier.

As we have seen, British problems were exacerbated by misuse of their artillery, and dispersal of artillery was a symptom of a wider malaise. The generation of high commanders of the Second World War had been junior officers in the First, and the Western Front style attrition was anathema to them. Liddell Hart's 'indirect approach' offered a seductively attractive way of avoiding the attritional warfare of the Western Front. Although far from consistent as a theory, the indirect approach replaced the military principle of concentration of force in favour of dispersion. Major-General Eric Dorman-Smith, Auchinleck's Deputy CGS, openly admitted Liddell Hart's influence. While recognizing that a flaw in the British Army's fighting methods had been a tendency towards overextension of forces, Dorman-Smith failed to acknowledge that this was inherent in the indirect approach.

Two formations epitomize the British Desert Army's 'indirect approach': the Jock Column and the Brigade Group. The former was a tiny, all-arms unit, effective enough in a raiding and screening role. In principle, the brigade group was a healthy step towards a combined arms battlegroup on the German or American model, but in practice it institutionalized dispersion of effort and made command and control more difficult. The decision by XXX (British) Corps, after surprising Rommel during Operation CRUSADER in November 1941, to dispatch the three armoured brigades of 7th Armoured Division to divergent objectives contrasts strongly with Soviet and German practice of concentrating armour. The Gazala battles of 1942 showed again the danger of splitting the forces of Eighth Army into small units lacking in fire power and 'punch'. Dispersion was a matter of practice as well as organization.

The arrival of Montgomery to command Eighth Army in August 1942 brought about a return, doctrinally speaking, to 1918, codified and modified by Kirke and *FSR 1935*. Gone was the era of the Jock Column and Brigade Group; the division again became the basic tactical unit. Artillery was centralized, and massive bombardments proved highly effective – not least against German anti-tank guns. All-arms cooperation took pride of place, aided by alterations to the structure of formations, begun under the previous regime, which made them less 'tank-heavy'. In place of the free-wheeling if half-baked mobile warfare of the previous two years, Montgomery's hallmark became the tightly controlled, centralized, attritional battle, a phenomenon neatly encapsulated in the phrase 'the tidy battlefield'. After his unhappy experience with a large armoured *corps de chasse* (X Corps) at the Second Battle of El Alamein, Montgomery was reluctant to let armour off the leash.

Moreover, Montgomery placed much emphasis on getting logistic preparations in place before the attack. In this he was lucky in that, by late 1942, British commanders were reviving adequate supplies of war-making material, as industry in Allied countries geared up for total war. His method was one of launching what he called 'colossal cracks' against the enemy. The Monty style was thus based on heavy firepower and methodical advances. He was concerned to keep casualties as low as possible, and thus conserving the morale of his armies.

Montgomery was undoubtedly a highly skilled commander. He had, unusually for a British soldier of his generation, a thorough understanding of what would now be called operational art. Yet Montgomery's cautious approach to warfighting is controversial. He can be criticized for sloth and overkill in his approach to operations such as crossing the Straits of Messina in September 1943, or the Rhine Crossings of March 1945. His wariness is explicable in terms of his realistic appraisal of what his army could actually achieve, and his profound and well-founded mistrust of British armour. It is instructive when he tried something more imaginative during Operation MARKET GARDEN in September 1944, it went badly wrong. He returned to type in subsequent operations, and returned to his winning ways. The Monty method suited the British Army. It was a conscript force, badly overstretched, and had ever-dwindling manpower reserves, and was thus unable to sustain heavy casualties. Montgomery delivered victory at an acceptable cost in British casualties, and this compensates for much that might be criticized about his methods.

Montgomery created and disseminated effective warfighting doctrine. However, effective application of that doctrine depended to a large degree on Montgomery himself being present. Montgomery, nothing if not didactic, groomed his protégés (such as Oliver Leese, who succeeded in command of Eighth Army in December 1943) in his methods of command. However, the record of Montgomery's acolytes was patchy at best. His successors in Italy often seemed to lose sight of the importance of massive force. Attacks, although impressive on paper, were often too weak to achieve success. The complaint of General Alphonse Juin, the commander of the French Expeditionary Corps in Italy, that the British had 'a congenital inability to think in terms of large scale manoeuvres with an Army Group or even an Army' contained much truth.[16] In the first three battles of Cassino in 1944 the Allies fought a series of actions at corps level, only vaguely co-ordinated. Only in Operation DIADEM, the fourth battle, did the Allied forces fight as a cohesive whole. In part the improvement was thanks to the influence of Major General 'John' Harding, General Alexander's chief of staff.

Tactical doctrine also proved surprisingly difficult to get right. Unlike in the First World War, there was no single major theatre in which the Army was engaged from beginning to end. Hard-won lessons from one theatre did not necessarily transfer well to another. In part this was because some tactics were theatre-specific, but there were also institutional problems and the 'not invented

here' syndrome was alive and well. Thus in Normandy in 1944, troops had to relearn some of the lessons painfully acquired in the Mediterranean. There were similar problems with joint doctrine. Following the 1940 campaign, there was a fierce bureaucratic battle between the Army and RAF over the control of aircraft, including a call in the 1940 Bartholomew Report for a tactical air force under Army control. During the Desert campaigns soldiers, airmen (and indeed, sailors) learned to work together, and by the end, cooperation between ground and air was very good indeed. But it proved difficult to transfer air-land doctrine to Normandy – a process that was exacerbated by personality clashes between Montgomery and some senior airmen.

On the other side of the world, another British general created effective warfighting doctrine and imposed it on his command. However General Sir William ('Bill') Slim's approach during the Burma campaign was markedly different from Montgomery's. His methods accord closely with the modern 'manoeuvrist approach'. During his greatest victory, Operation EXTENDED CAPITAL, the Mandalay-Meiktilla campaign of 1945, Slim, a model joint officer, matched strength against weakness, achieving momentum and tempo. He never lost sight of his 'fundamental aim of destroying the enemy' rather than taking ground for its own sake. Slim sought to attack the enemy commander's mind by destroying his will, using deception and surprise. In Robert Lyman's words, 'Slim's intent was to *persuade* his enemy that the battle was lost rather than *prove* it to him through the physical destruction of his army'. However, Slim also recognized the need to destroy the Japanese forces in battle, although he strove to avoid frontal assault, a mark of his mastery of operational art. Nevertheless, he was not afraid to throw his forces into attritional fighting when he deemed it necessary.[17]

Slim recognized the importance of mission command, although he would not have recognized the term. Indeed, he penned one of the classic descriptions of Mission Command. It comes as no surprise to find that Slim's guiding light was the advice given to him as a young officer, by a grizzled sergeant major: 'There's only one principle of war and that's this. Hit the other fellow, as quick as you can, and as hard as you can, where it hurts him most, when he ain't lookin'![18]

Slim certainly warrants Duncan Anderson's description of him as 'the very model of a modern manoeuvrist general', but even models have flaws. He took risks with logistics that courted defeat. It is debatable whether Slim's methods would have worked as well under different circumstances, in Normandy, for instance, had he swapped places with Montgomery. Moreover, Slim's practice of mission command did not always match the ideal he preached; indeed, as Anderson has suggested, sometimes his control of Fourteenth Army's corps and divisional commanders bore a resemblance to Montgomery's methods in Europe.[19] This was not the only area of similarity between the two men. Both created a coherent warfighting doctrine and indoctrinated their respective commands. Both nurtured a group of protégés (although Slim claimed that he hadn't), reminiscent of the Wolseley and Roberts 'Rings' of the late Victorian Army. Above all, both were successful.

The Army and Doctrine since 1945[20]

Thus at the end of the Second World War there were two warfighting cultures in the British Army. The Monty method emphasized attrition and the tidy battlefield, while Slim's approach was more manoeuvrist. Both men served as CIGS, Montgomery from 1946 to 1948, when he was succeeded by Slim, who was in office until 1952. In theory both had the opportunity of imposing their vision on the Army. In practice, Montgomery cast a long shadow over the Army in Europe. Many of his protégés were placed into important positions, and the Monty method prevailed until the 1980s.

The British Army had entered Germany as occupiers in 1945, but within a few years had turned itself into a force that prepared to defend the North German Plain from Soviet attack. Hemmed in literally by geographical constraints, and metaphorically by the politically imposed strategy of forward defence, the British Army of the Rhine (BAOR) adopted an approach based on positional defence and firepower leading to attrition of attacking enemy forces. One of the problems was the view that, ultimately, conventional forces were a nuclear trip-wire. As the 1952 pamphlet *The Armoured Division in Battle* showed, the Army had not entirely abandoned ideas of manoeuvrism, but the parallel pamphlet on infantry reflected the tidy battlefield. Mobility remained important at the tactical level, but overall in the 1950s and 1960s,

> The British Army viewed the defence of Germany in terms of a series of small tactical-level engagements and failed to develop a coherent corps plan or operational concept for defending its sector of NATO's front.[21]

Montgomery's legacy had become debased indeed.

Thinking changed somewhat in the 1970s. The introduction of NATO's 'Flexible Response' strategy in 1967, which enhanced the importance of conventional defence, triggered a reassessment of BAOR's methods. While positional defence and firepower remained at the heart of 1 (BR) Corps's scheme of manoeuvre, such as it was, greater flexibility was built into it. There were plans to carry out a phased withdrawal, and to wear down Soviet forces by drawing them into killing zones and using modern firepower such as Milan. If the unthinkable had ever occurred, several painful facts would in all likelihood have rendered this approach ineffective. First, Soviet forces were too strong. Second, 1 (BR) Corps was too weak and ill-equipped. Third, 1 (BR) Corps aimed to fight not as a corps, but as a sort of 'holding company' for a series of tactical battles, thus effectively surrendering the initiative to the enemy. Fourth, there was little cooperation with the other NATO corps, and certainly no notion of fighting as a coherent Army Group.

This unsatisfactory state of affairs was to lead to a doctrinal revolution in the British Army. This was affected by external influences. In its efforts to recover from the trauma of defeat in Vietnam, from the mid-1970s the US Army entered a heady period of doctrinal debate and experimentation. This was informed by intensive study, by British and American military academics, of the forces of the USSR. One result of was the acceptance, in both the UK and USA, of the concept of an operational level of war, between the strategic and the tactical. Another was the recognition that the US experience of air mobility in Vietnam had important lessons for the Central Front. The concepts of Follow on Forces Attack (FOFA) and Airland Battle were introduced by the British through NATO, especially through the 1983 tactical doctrine *Allied Tactical Publication 35.*

This doctrinal ferment in the US forces was paralleled by a rather more low key debate in the British Army. Key manoeuvrist texts such as William Lind's *Maneuver Warfare* and Richard Simpkin's *Race to the Swift* (the latter possibly more quoted than read) were being perused by British officers at Staff College. Lower down the Army, Sandhurst's War Studies Department introduced officers to historical examples, especially those drawn from the German *Blitzkrieg* and Soviet campaigns of the Second World War, and the Arab-Israeli Wars. The political climate of the early 1980s, marked by the rebirth of the Campaign for Nuclear Disarmament, made a strategy based on the battlefield use of nuclear weapons increasingly unacceptable.

All this coincided with the advent of a handful of British senior officers who were determined to place BAOR onto a sounder footing. General (later Field Marshal) Sir Nigel ('Ginge') Bagnall rates as one of the most significant reformers in the 300 year history of the British Army. As commander

of 1(BR) Corps in 1981, he began the process by which the British Army embraced the tenets of the Manoeuvrist Approach, and Mission Command. Moreover, he introduced the idea of the corps-level counterstroke. This involved fighting the corps as a corps, leading to, in the words of an official publication 'a much better chance of defeating the enemy rather than delaying him'.[22] At NORTHAG from 1983-85, Bagnall carried on his work of reform, and as CGS from 1985 to 1988, he commissioned *Design for Military Operations* (1989), often, if misleadingly, described as the British Army's first ever formal doctrine.

Bagnall was not a one-man band. If he had been, his reforms would have hardly taken root as firmly as they did. He had supporters within the Army, the punningly-named 'Ginger Group', which included the then Colonel Timothy Granville-Chapman, principal author of *Design for Military Operations*. Equally, if Bagnall's labours had been followed by a reaction, the move to a doctrinal army would have been stillborn. Instead, Bagnall's successor at 1 (BR) Corps and NORTHAG, General Sir Martin Farndale, extended the corps counterstroke concept, and in the mid to late 1980s the ideas of the Manoeuvrist Approach, Mission Command and the operational level of warfare became firmly embedded into the Army's style of warfighting. As many commentators have pointed out, it is a rich irony that the British Army should have reached a peak of intellectual and doctrinal readiness to defend northern Germany at the very moment when the Soviet threat disappeared. Belatedly, the legacy of Slim supplanted that of Montgomery.

The publication of *Design for Military Operations* was only one half of the story of the British Army's doctrinal revolution. For much of the post-1945 period, in General Kiszely's words:

> To most officers there was no such thing as 'doctrine', only 'pamphlets' – and they were, at best a basis for discussion, and for quoting in promotion exams.[23]

From the 1990s onwards this began to change, as doctrine was taken seriously and internalized by Army officers. One major reason for this was that it was promptly validated in the most dramatic fashion, by being applied successfully by the British Army in offensive operations in the First Gulf War (1991). Another was Bagnall's powerful influence in 'forcing through a complete change of attitude and practice' not least through making sure that Staff College DS 'left to command their units properly indoctrinated'.[24] One might point to other factors: the move to an overwhelmingly graduate officer corps; the shake up occasioned by the end of the Cold War; the establishment in 1988 by Bagnall of a Higher Command and Staff Course (HCSC) for top-rate colonels and brigadiers, focused at the operational level; these and other factors may account for the remarkable change in attitude towards doctrine. While some officers may claim, perhaps with justice, that today there is too much doctrine; it is rare to hear anyone argue that there should not be any at all.

The period since 1989 has seen further dramatic changes. The ending of the bipolar world of the Cold War has seen the disappearance of the Central Front, and a return to expeditionary warfare, with the Army being almost constantly on operations. Digitization and the Revolution in Military Affairs will – if some pundits are to be believed – have a profound impact on future warfare. Moreover, the doctrinal revolution has been accompanied by a revolution in jointery. The creation of Permanent Joint Headquarters, the emergence of properly structured Joint Task Forces, the Joint Services Command and Staff College, the development of the HCSC from an Army course to a joint course, and the setting up of such organizations as the Joint Helicopter Command are testimony to the radical changes in the way the Services do business. So is the development of joint doctrine. The RAF and RN followed the Army in producing single service doctrine in 1991 and 1995 respectively, while in 1997 the first edition of *British Defence Doctrine* appeared. The

Joint Doctrine and Concepts Centre opened its doors in 1998. For all that, change in British Army doctrine since 1989 has been evolutionary rather than revolutionary, although the original context in which doctrine was developed, high intensity war in the Central Front, has vanished. Perhaps this reflects a belief that, like the *FSR* of earlier days, the original doctrine was fundamentally sound, and has proved capable of being adapted to a range of circumstances.

The British Style of Command

The historically non-doctrinal, pragmatic nature of the British Army has been reflected in the British style of command.[25] The Duke of Wellington once said of the French commanders that he faced during the Peninsular War (1808-1814) that 'They planned their campaigns just as you might make a splendid piece of harness. It looks very well; and answers very well; until it gets broken; and then you are done for. Now I made my campaigns of ropes. If anything went wrong, I tied a knot; and went on'.[26] British generals down the ages have had to display similar pragmatism and improvisation in their campaigns, making use of scant resources. 'The British style of command' has been influenced by a number of factors.

The first might be termed 'the generalship of poverty'. Anthony Eden, who served as a junior officer in the First World War and a senior politician in the Second, once counselled against holding high command 'in the first two years of any war in the British Army'. Rather, it was 'Better wait until the stuff begins to come along… after the third year or later'.[27] This was certainly the experience of the two world wars, and can be applied to many other conflicts. Wavell's campaigns in the Middle East in 1940-41, which involved an extremely delicate balancing of resources and commitments have been described as 'a thing of shreds and patches'.[28] Post-1945 campaigns, such as the initial stages of Korea (1950), the Suez operation (1956) and the two Gulf Wars (1991 and 2003) saw the cobbling together of forces amid much improvisation. On only one occasion, in 1918 on the Western Front, has the British army had the luxury of fighting a 'rich man's war' with unlimited resources. Even in 1944-45, there were severe limitations on manpower. This was the product of mobilization for total war and the Army being given priority for resources, and even then it was for a brief period: had the war gone on into 1919, Haig's forces would have faced drastic cuts, for Britain's manpower budget faced exhaustion.

The second factor is the small wars tradition. For most of the period of its existence, the main focus of the British Army has been small-scale conflicts of various types (colonial conflicts, COIN, Peace Support) rather than large-scale conventional wars. Such conflicts also tended to be fought on a shoestring. With the exception of the high commanders of the Second World War, most of whom (but by no means all) cut their teeth on the Western Front, the formative influences of British commanders have tended to be in small wars. This has had positive effects: the flexibility and 'rope-tying' skills acquired in small wars are excellent training for high command. The small wars inheritance also has its down side. The very nature of this sort of conflict often involves troops scattered in relatively small packets over a wide area, which inhibits formation training. When major wars come along, expeditionary forces have to be hastily assembled for specific tasks, such as those scraped together for the campaigns in Norway (1940) and Korea (1950).

To step up from command in even a 'big small war' such as the Second Boer War (1899-1902) to a major conflict against a first class enemy is to ask a great deal of a general. Some, notably Sir John French in 1915, have failed the test. Other commanders have experienced a 'halfway house' between the two extremes, by conducting a big small war in the midst of a major conflict. Campaigns such as those against the Turks in Palestine in the First World War, and the Italians in the Second, have the feel of large-scale colonial wars, and certainly have more in common

with each other than with Passchendaele or Normandy. 'Big small wars' tended to play to the strengths of British commanders with colonial experience. Allenby, a relative failure on the Western Front, thrived in Palestine, in 1917-18. Wavell served under Allenby and was guided by his experience in the Middle East rather than his earlier service on the Somme.

Of course, it would be wrong to judge the small wars tradition solely in terms of its deleterious effect on the performance of the British Army and its commanders in high intensity operations. Over the last two centuries the British Army has had an enviable record of success in small wars. Such conflicts are the British Army's bread-and-butter, they were the only experience of active service command that many British officers have undergone. We should never lose sight that, with the debatable exception of the BAOR era, the British Army has primarily been a small wars *gendarmerie* capable of generating an expeditionary force in times of emergency. That pattern seems set to continue into the first decades of the 21st century.

Coalition warfare has been a virtually ever-present influence on the British style of command. Of all the major wars fought by Britain since 1688, only one – the American War of Independence (1775-83) was fought without Great Power allies: and that war ended in Britain's only major defeat. Coalition wars are conducted, often painfully slowly, by committee, and the opportunity for unilateral action is severely constrained. An ability to negotiate, and an aptitude for diplomacy, have been invaluable assets for a high commander to possess.

As a rule, the larger the number of troops a commander possesses, the greater his influence with his coalition partners. The exact status enjoyed by British commanders within a coalition has varied over time. Marlborough and Wellington, in 1704 at Blenheim and 1815 at Waterloo respectively, presided over multinational forces, with British troops constituting a relatively modest proportion. Both men operated alongside allies with sizeable forces. Earlier, in the Peninsular, Wellington had commanded an Anglo-Portuguese-Spanish Army in which British troops were in the majority. French and Haig during the First World War were always the junior partners to the French. However at Gallipoli, where the British Empire contingent outnumbered the French, Hamilton was the senior man. In Italy during 1943-45 British and US forces were roughly equal, but in North-West Europe during 1944-45 Anglo-Canadian forces declined steadily as an overall percentage of the total Allied forces. This contributed to the decline in Montgomery's influence in the coalition, already undermined by his abrasive personality. By contrast, Alexander was a great success as a coalition commander in the Mediterranean, in the sense that he smoothed over inter-Allied difficulties; however he conspicuously lacked 'grip' over subordinates, and the conduct of operations suffered as a consequence.

Since 1945, the challenges of coalition warfare have reasserted themselves in various ways. British generals have several times found themselves in the position of commanding a relatively small contingent within a US-dominated coalition force (Korea 1950-3, Gulf 1991 and 2003), or in a position of near-equality within a coalition operation (at Suez with the French in 1956; operations in former Yugoslavia in the 1990s).

Many of the problems of coalition warfare are repeated in small wars, with the need to cooperate with individuals or bodies that may not come within the military chain or command, or at least can not be treated simply as a subordinate. This might involve cooperating with police units, as during the phase of 'police primacy' in Northern Ireland in the 1970s and 1980s; or with NGOs in contemporary Peace Support. It should not be forgotten that an enduring theme of British operations, in both small wars and high intensity conflicts, is that numbers of foreign and imperial troops have been under British command. Many small wars were only possible because the British were

able to make use of locally raised troops, such as the pre-1947 Indian Army, the *firqats* in Oman in the 1970s, or the Ulster Defence Regiment in Northern Ireland. Likewise, in both world wars 'British' armies such as Haig's on the Somme or Montgomery's at Alamein or in Normandy were actually Commonwealth coalition forces, as sizeable Australian, Canadian, South African, New Zealand and Indian contingents served under British command. This complicated command arrangements, as Commonwealth contingents could not be treated simply as if they were from the Mother Country; as Currie, commander of the Canadian Corps in 1918, and Blamey, the Australian commander in the Middle East in 1941, both made clear.

Several other factors that have shaped the British style of command are also worth mentioning. The first is the lack of joint structures, doctrine, and training. Given the long association of the Army and Royal Navy in amphibious and expeditionary operations, this state of affairs was surprising, to put it mildly. Long practice of the Services and commanders working together, as in the Mediterranean in the Second World War, could overcome these problems. In the best British spirit of pragmatism, commanders displaying a 'can do' attitude and willingness to cooperate have frequently compensated for structural inadequacies – General Hamilton and Admiral de Robeck at Gallipoli are a case in point. But all this depended to an alarming degree on the ability of the commanders to work together.

These problems have been at least partially remedied by the 'jointery revolution' of the 1990s. Similarly, the lack of a doctrine for command has been addressed with the introduction of Mission Command[29], and the HCSC provides some of the training for high command that was singularly lacking throughout much of the army's history.

Conclusion

For most of its history, the British Army has eschewed prescriptive doctrine, priding itself on its empirical attitude to problem solving. The British style of command has been characterized by a similarly pragmatic, undoctrinaire, approach. However, it is a fallacy to believe that the Army lacked *any* sort of doctrine. Doctrine did exist, but it was either semi-formal, associated with a specific commander in a specific theatre, or took the form of broad principles. With the adoption of formal doctrine in 1989, the Army entered a new era. Complacency would be extremely unwise; but in the early years of the 21st century, the British Army is probably better prepared intellectually to face the challenges of complex operations than at any time in its history.

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This article contains the author's opinions and does not represent the opinions of the Joint Services Command and Staff College or any other body or organization.

Endnotes

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GLOSSARY

The American, British, Canadian and Australian Standardization Programme Organization (ABCA)
The ABCA Programme is an agreement between those 4 armies to allow them to achieve a degree of standardization sufficient to allow them to operate together in a coalition. The New Zealand Army and the United States Marine Corps have associate status, but in practice their doctrines reflect ABCA practice. *ABCA is not an alliance.*

Administration
1. The management and execution of all military matters not included in tactics and strategy.
2. The internal management of units.
(AAP-6)

Administrative Authority
A commander vested with those aspects of command that are concerned with administration. (JWP 0-01.1) *See Command, Command and Control Relationships*

Aim (Military)
A single unambiguous military purpose that must be established before a plan can be developed at any level of command for a military operation. *(JWP 0-01.1)*

Air Interdiction (AI)
An air operation conducted to destroy, neutralize or delay the enemy's military potential before it can be brought to bear effectively against friendly forces at such a distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required. *(AAP-6)*

Air Manoeuvre
Those operations primarily within the land component scheme of manoeuvre, seeking decisive advantage by the exploitation of the third dimension by combined arms forces centred around rotary wing aircraft, within a joint framework. *(JWP 0-01.1)*

Air Superiority
That degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related land, sea and air forces at a given time and place without prohibitive interference by the opposing force. *(AAP-6)* See Air Supremacy, Control of the Air, Favourable Air Situation

Air Supremacy
That degree of air superiority wherein the opposing air force is incapable of effective interference. *(AAP-6) See Air Supremacy, Control of the Air, Favourable Air Situation*

Alliance
The result of formal agreements (ie treaties) between two or more nations for broad, long-term objectives which further the common interests of the members. *(NATO)*

Area of Influence
A geographical area wherein a commander is directly capable of influencing operations, by manoeuvre or fire support systems normally under his command and control. *(AAP-6)*

Area of Interest
That area of concern to a commander relative to the objectives of current or planned operations, including his areas of influence, operations and/or responsibility, and areas adjacent thereto.
(AAP-6)

Area of Operations
1. At the operational level, the geographical area defined by the operational level commander within his *Joint Area of Operations* in which a commander designated by him (usually a component commander) is delegated authority to conduct operations.
2. At the tactical level, a geographical area, defined by lateral and rear boundaries, which is assigned to a commander by a higher commander. Within these boundaries the commander has the authority to conduct operations in order to conduct his mission.
(JWP 0-01.1) See levels of warfare, joint area of operations

Asymmetric Attack
Actions undertaken by state or non-state parties (friendly or adversary), to circumvent or negate an opponent's strengths and capitalize on perceived weaknesses through the exploitation of dissimilar values, strategies, organizations and capabilities. Such actions are capable, by design or default, of achieving disproportionate effects, thereby gaining the instigator an advantage probably not attainable through conventional means. *(JWP 0-01.1)*

Attrition
The reduction of the effectiveness of a force caused by loss of personnel and materiel. *(AAP-6)*

Attrition Warfare
A style of warfare characterized by the application of substantial combat power that reduces an enemy's ability to fight through loss of personnel and equipment. Essentially it aims at the physical destruction of the enemy. *(JWP 0-01.1)*

Battle Damage Assessment
The timely and accurate estimate of damage resulting from the application of military force, either lethal or non-lethal, against a pre-determined objective assessment. *(AP 3000)*

Battlespace
All aspects of air, surface, subsurface, land, space and the electromagnetic spectrum that encompass the area of operations. *(JWP 0-01.1)*

Battlespace Dominance
The degree of control over the dimensions of the battlespace that enhances friendly freedom of action and denies the enemy freedom of action. It permits power projection and force sustainment to accomplish the full range of potential missions. *(JWP 0-01.1)*

Campaign
A set of military operations planned and conducted to achieve a strategic objective within a given time and geographical area, which normally involve maritime, land and air forces. *(AAP-6)*

Campaign Authority
In Peace Support Operations (PSO), Campaign Authority is the amalgam of four related and inter-dependent factors:
a. the perceived legitimacy of the international mandate that establishes a PSO;
b. the perceived legitimacy of the freedoms and constraints, explicit or implicit in the mandate, placed on those executing the PSO;
c. the degree to which factions, the local population and other actors subjugate themselves to the authority of those executing the PSO; from unwilling compliance to freely given consent; and
d. the degree to which the activities of those executing the PSO meet the expectations of the factions, local population and others.
(New) (JWP 3-50)

Campaign Themes
Predominant identifiable themes from within the Continuum of Operations that define the nature of the campaign. *(New)*

Major Combat
Operations characterized as war, where combat is frequent and widespread. *(New)*

Counter-Insurgency
Those military, paramilitary, political, economic, psychological and civic actions taken to defeat insurgency. *(AAP-6)*

Peace Support
A peace support operation impartially makes use of diplomatic, civil and military means, normally in pursuit of United Nations charter purposes and principles, to restore or maintain peace. Such operations may include conflict prevention, peacemaking, peace enforcement, peacekeeping, peacebuilding and/or humanitarian operations. *(AAP-6)*

Limited Intervention
Limited intervention operations have limited objectives such as the rescue of hostages, security of non-combatants or re-establishment of law and order. *(JWP 0-01.1)*

Peacetime Military Engagement
All military activities involving other nations that are intended to shape the security environment in peacetime. *(New)*

Military Aid to the Civil Authority
The collective term given to the three types of operations which may take place in a civilian environment ie MACC, MACM and MACP. *(JWP 0-01.1)* See *associated entries*

Centre of Gravity
Characteristic(s), capability(ies) or locality(ies) from which a nation, an alliance, a military force or other grouping derives its freedom of action, physical strength or will to fight. *(AAP-6)*

Close Air Support (CAS)
Air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces. *(AAP-6)*

Coalition
An ad-hoc arrangement between two or more nations for common action. *(JWP 0-01.1)*

Cohesion
The action or fact of forming a united whole. *(OED)*

Conceptual Cohesion
Quality of 'kindred spirit'; a common framework for the understanding of the employment of military force, based on doctrine. *(New)*

Moral Cohesion
Quality of 'sticking together', based on complex social factors including morale, leadership, belief in the cause and shared experience. *(New)*

Physical Cohesion
Tactical strength derived from the coordination of military operations up, down and across the chain of command, providing mutual support, depth and combined arms integration. *(New)*

Combat Arms
Combat elements that engage the enemy directly; they fight, typically employing direct fire weapons. *(New)*

Combat Effectiveness
A measurement of the ability of a unit to carry out its assigned mission, role or function.
(JWP 0-01.1)

Combat Identification (Combat ID)
The process of combining situational awareness, target identification, specific tactics, training and procedures to increase operational effectiveness of weapons systems and reduce the incidence of casualties caused by friendly fire. *(JWP 0-01.1)*

Combat Power
The total means of destructive and/or disruptive force which a military unit/formation can apply against the opponent at a given time. *(AAP-6)*

Combat Readiness
In order to be described as combat ready, a unit or formation must be:
a. At such a manpower strength and scale of transport and equipment that it can fight immediately without delay imposed by mobilization;
b. Within 15% of its authorised strength;
c. Independent of the call up of reservists;
d. Able to fight when required within a laid down maximum period
(JWP 0-01.1)

Combat Ready
1. As applied to organizations or equipment: available for combat operations.
2. As applied to personnel: qualified to carry out combat operations in the unit to which they are assigned.
(AAP-6)

Combat Service Support (CSS)
The support provided to combat forces, primarily in the fields of administration and logistics. *(AAP-6)*

Combat Service Support Elements
Force elements that include: logistic, medical and equipment support; personnel welfare and administration and some force support engineers (such as those providing water and electrical power supply, infrastructure construction and route maintenance). *(New)*

Combat Support
Fire support and operational assistance provided to combat elements. *(AAP-6)*

Combined
Adjective used to describe activities, operations and organizations, in which elements of more than one nation participate. *(AAP-6)*
[The term '*multinational*' is preferred within the UK and Allied joint communities.]

Combined Air Operations Centre (CAOC)
An organization to plan and direct the conduct of joint air operations. *(JWP 0-01.1)*

Combined Arms
Application of several arms, such as infantry, armour, artillery and aviation. *(JWP 0-01.1)*

Combined Joint Task Force Headquarters (CJTF HQ)
A CJTF HQ is a deployable, multinational, multi-service HQ of variable size, tailored to the mission and utilized by COMCJTF to exercise command over the entire CJTF. While it is recognized that a CJTF does not exist until activated, the term CJTF HQ denotes a HQ composed of a nucleus, sourced from a CJTF parent HQ, plus necessary augmentation, support elements, and equipment to achieve and maintain full operational capability. *(NATO)*

Command
1. The authority vested in an individual of the armed forces for the direction, coordination and control of military forces.
2. An order given by a commander; that is, the will of the commander expressed for the purpose of bringing about a particular action.
3. A unit, group of units, organization or area under the authority of a single individual.
4. To dominate an area of situation.
5. To exercise command.
(AAP-6)

Command and Control (C2)
Expression used to mean:

The processes through which a commander exercises *command* (whether *full* or *operational* or *tactical command*) or *operational* or *tactical control* to organize, direct and coordinate the activities of the forces allocated to him.

The structures and systems through which these processes are exercised. A command, control, (communications) and information system (C3I) is an integrated system comprising *doctrine*, procedures, organizational structure, personnel, equipment, facilities, and communications, which provides authorities at all levels with timely and adequate data to plan, direct and control their activities. *(AJP-01)*

Command and Control Relationships

Full Command (FULL COMD)
The military authority and responsibility of a commander to issue orders to subordinates. It covers every aspect of military operations and administration and exists only within national services. *(AAP-6)*
[No multinational commander will therefore have Full Command over forces assigned to him by other nations.]

Operational Command (OPCOM)
The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical control as the commander deems necessary. *(AAP-6)*
[It does not include responsibility for *administration* or *logistics*.]

Operational Control (OPCON)
The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time, or location; to deploy units concerned, and to retain or assign tactical control of those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control. *(AAP-6)*

Tactical Command (TACOM)
The authority delegated to a commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority. *(AAP-6)*

Tactical Control (TACON)
The detailed and usually local direction and control of movement and manoeuvre necessary to accomplish missions or tasks assigned. *(AAP-6)*

Command Post Exercise (CPX)
An exercise in which the forces are simulated, involving the commander, his staff and communications within and between headquarters. *(AAP-6)*

Command Support Elements
Force elements that assist commanders in the exercise of command. They include all types of staff; communications, intelligence and information systems that provide a range of command and control tools; life support to protect, sustain and move the commander and his staff; and standard procedures which focus command and staff effort. *(NATO)*

Commander's Intent
A concise expression of the purpose of the campaign or operation, the desired results and how operations will progress towards achieving the desired end-state. At the tactical level, the Commander's Intent should be focused on the effect that he wishes to achieve on the enemy. *(JWP 0-01.1)*

Communications and Information Systems (CIS)
Collective term for communication systems and information systems. *(JWP 0-01.1)*

Component Command
A functional component command or service component command responsible for planning and conduct of a maritime, land, air, special or other operation as part of a *joint* force. *(AAP-6)*

Component Commander
A designated commander responsible for the planning and conduct of a maritime, land, air, special or other operation as part of a joint force. *(AAP-6)*

Concept of Operations
A clear and concise statement of the line of action chosen by a commander in order to accomplish his mission. *(AAP-6)*

Conditions for Success
The situation and state of affairs that must pertain if a military campaign or operation can be considered successful. The conditions may be military conditions which are normally expressed as control of the environment, or may be non-military such as the decision of a hostile government to desist from action. *(JWP 0-01.1)* See *End-state*

Conflict
(Armed) Conflict (usually abbreviated) is a situation in which violence or military force is threatened or used. Generally it is a contest between two opposing sides, each seeking to impose its will on the other; however, intra-state conflict may involve several factions. *(JWP 0-01.1)*

Conflict Prevention
A peace support operation employing complementary diplomatic, civil, and – when necessary – military means, to monitor and identify the causes of conflict, and take timely action to prevent the occurrence, escalation, or resumption of hostilities. *(AAP-6).* See also *Peace Building, Peacekeeping, Peacemaking, Peace Support*

Continuum of Operations
A conceptual framework which explains the relationship between types of tactical operations within the complexity of the military environment at campaign level. *(New)*

Control
That authority exercised by a commander over part of the activities of subordinate organizations, or other organizations not normally under his command, which encompasses the responsibility for implementing orders or directives. All or part of this authority may be delegated. *(AAP-6)*

Control of the Air
The three degrees of control of the air are: *favourable air situation; air superiority; and air supremacy. (AP 3000)* See associated entries

Coordinate
To bring the different elements of a complex activity or organization into a harmonious or efficient relationship. *(OED)*

Coordinating Authority
The authority granted to a commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more countries or commands, or two or more services or two or more forces of the same service. He has the authority to require consultation between the agencies involved or their representatives, but does not have the authority to compel agreement. In case of disagreement between the agencies involved, he should attempt to obtain essential agreement by discussion. In the event he is unable to obtain essential agreement he shall refer the matter to the appropriate authority. *(AAP-6)*

Counter-Insurgency (COIN)
Those military, paramilitary, political, economic, psychological, and civic actions taken to defeat insurgency. *(AAP-6)* See *Campaign Themes*

Culminating Point
An operation reaches its culminating point when the current operation can just be maintained but not developed to any greater advantage. *(JWP 0-01.1)*

Deception
Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests. *(AAP-6)*

Decisive Points
A point from which a hostile or friendly centre of gravity can be threatened. This point may exist in time, space or the information environment. *(AAP-6)*

Defence Diplomacy
To provide forces to meet the varied activities undertaken by the MOD to dispel hostility, build and maintain trust and assist in the development of democratically accountable armed forces, thereby making a significant contribution to conflict prevention and resolution. *(SDR White Paper)*

Defence in Depth
The siting of mutually supporting defence positions designed to absorb and progressively weaken attack, prevent initial observations of the whole position by the enemy, and to allow the commander to manoeuvre his reserve. *(AAP-6)*

Deterrence
The convincing of a potential aggressor that the consequences of coercion or armed conflict would outweigh the potential gains. This requires the maintenance of a credible military capability and strategy with the clear political will to act. *(AAP-6)*

Directed Logistics
The ability to direct logistic effort efficiently and effectively where and when it is needed using information technology and (guaranteed) communications to improve prediction, flexibility and response. *(New)*

Directive
A military communication in which policy is established or a specific action is ordered.
A plan issued with a view to putting it into effect when so directed, or in the event that a stated contingency arises.
Broadly speaking, any communication which initiates or governs action, conduct, or procedure. *(JWP 0-01.1)*

Dislocation
To dislocate is to deny another party the ability to bring his strengths to bear, or to persuade him that his strength is irrelevant. *(JWP 0-01.1)*

Disruption
Use of force to shatter the cohesion of a military formation and prevent it from functioning effectively in combat. *(JWP 0-01.1)*

Doctrine
Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgement in its application. *(AAP-6)*

Effects-Based Approach
A way of way of thinking that encourages a broader and longer term view of a situation. It focuses on outcomes rather than activity, and advocates collaboration and synchronized actions from military and non-military forces. It requires a thorough understanding of the strategic environment in order to determine the appropriate ends, and the orchestration of violent and non-violent actions to achieve the desired effects. *(New)*

Electronic Warfare
Military action to exploit the electromagnetic spectrum encompassing: the search for, interception and identification of electromagnetic emissions, the employment of electromagnetic energy, including directed energy, to reduce or prevent hostile use of the electromagnetic spectrum, and actions to ensure its effective use by friendly forces. *(AAP-6)*

Enabling Activities
Tactical activities that link, support, or create the conditions for offensive, defensive and stability operations. *(New)*

End-State
The political and/or military situation to be attained at the end of an operation, which indicates that the objective has been achieved. *(AAP-6)*

Envelopment/Envelop
An offensive manoeuvre in which the main attacking force passes around or over the enemy's principal defensive position to secure objectives to the enemy's rear. *(AAP-6)*

Escalation/de-escalation
A qualitative transformation in the character of a conflict where the scope and intensity increases or decreases, transcending limits implicitly accepted by both sides. *(JWP 0-01.1)*

Expeditionary Forces
Forces projected from the home base *(ie UK)* capable of sustained operations at distance from that home base. *(JWP 0-01.1)*

Expeditionary Operations
The projection of military power over extended lines of communication into a distant operational area to accomplish a specific mission. *(AAP-6)*

Favourable Air Situation
An air situation in which the extent of air effort applied by the enemy air forces is insufficient to prejudice success of friendly sea, land or air operations. *(JWP 0-01.1)*

Fighting Power
The ability to fight, consisting of a *conceptual component* (encompassing the thought process involved in producing military effectiveness); a *moral component* (the ability to get people to fight) and a *physical component* (the means to fight), measured by assessment of operational capability. *(JWP 0-01.1)*

Fires
The effects of lethal and non-lethal weapons. *(US JP 1-02) (Quoted in JWP0-01.1)*

Fire Support
The application of fire, coordinated with the manoeuvre of forces, to destroy, neutralize or suppress the enemy. *(AAP-6)*

Fire Support Coordination Line (FSCL)
Within an assigned area of operations, a line established by the appropriate Ground Force Commander to ensure the coordination of fire not under his control, but which may affect current tactical operations. The FSCL is used to coordinate the fire of air, ground or sea weapons using any type of fire against surface targets. The FSCL should follow well-defined terrain features. The establishment of the FSCL must be coordinated with the appropriate Tactical Air Commander and other supporting and offensive support units. Supporting elements may attack targets forward of the FSCL without prior coordination with the Ground Force Commander, provided the attack will not produce adverse effects on, or to the rear of, the line. Attacks on surface targets behind the line must be coordinated with the appropriate Ground Force Commander. The primary purpose of the FSCL is to allow the rapid attack of targets beyond the line (usually from the air) without endangering friendly forces to the rear of the line. *(AAP-6)*

Force Generation
The process of providing suitably trained and equipped forces, and their means of deployment, recovery and sustainment to meet all current and potential future tasks, within the required readiness and preparation times. *(JWP 0-01.1)*

Force Preparation
The continuous process of manning, equipping, training and educating the Army for operations in general. *(New)*

Force Projection
The projection, application and sustainment of joint military capabilities, at global range, to achieve effects in support of joint campaign objectives. *(JWP 0-01.1)*

Force Protection
A process which aims to conserve the fighting potential of a deployed force by countering the wider threat to all its elements from adversaries, natural and human hazards, and fratricide. *(JWP 0-01.1)*

Force/Unit Definitions

Formation
A grouping of several units, together with dedicated command and command support elements. *(New)*

Battlegroup
A battlegroup is a tactical grouping, usually with armour and infantry under command, based on the HQ of an armoured regiment or infantry battalion (normally armoured or mechanized) or possibly on an armoured reconnaissance or aviation regiment. *(JWP 0-01.1)*

Unit
The smallest grouping capable of independent operations over long periods. It contains integral command support and combat service support elements. *(New)*

Sub Unit
Sub division of a unit (eg squadron, battery, company). *(New)*

Forms of Manoeuvre
Stylized description of the manoeuvre of friendly forces relative to the enemy. *(New)*

Forward Edge of the Battle Area (FEBA)
The foremost limits of a series of areas in which ground combat units are deployed, excluding the areas in which covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the manoeuvre of units. *(AAP-6)*

Forward Line of Own Troops (FLOT)
A line which indicates the most forward positions of friendly forces in any kind of military operation at a specific time. *(AAP-6)*

Fratricide
The accidental destruction of own, allied or friendly forces. A result of what is colloquially known as a 'blue on blue' engagement. *(JWP 0-01.1)*

Friction
The accumulation of chance errors, unexpected difficulties, enemy actions, and confusion in battle. It is the force that resists all action and which makes the simple difficult and the difficult seemingly impossible. *(JWP 0-01.1)*

Functions

Core Functions:
A conceptual framework derived from the Manoeuvrist Approach, used for the visualization and conduct of operations. *(New)*

Find
To locate, identify and assess the enemy's intentions.

Fix
To deny the enemy his goals, to distract him and to deprive him of freedom of action.

Strike
To manoeuvre and then take direct action to achieve the purpose of the mission.

Exploit
To seize the opportunity to achieve a higher commander's objective, or fulfil some part of his intent, directly. *(New)*

Functions in Combat:
An analytical tool for commanders and staffs which provides a complete description of everything that military organizations do prior to, during, and after operations, as a list of functions. *(New)*

Command
The authority vested in an individual of the armed forces for the direction, coordination and control of military forces. *(AAP-6)*

Information and Intelligence
Information – Unprocessed data of every description which may be used in the production of intelligence. *(AAP-6)*
Intelligence – The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity. *(AAP-6)*

Firepower
The amount of fire which may be delivered by a position, unit, or weapon system. *(AAP-6)*

Manoeuvre
Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect of the enemy in order to accomplish the mission. *(AAP-6)*

Protection
The means of preserving the fighting potential of a force so that it can be applied at a decisive time and place. *(New)*

Combat Service Support
The support provided to combat forces, primarily in the fields of administration and logistics. *(AAP-6)*

Humanitarian Assistance
Support provided to humanitarian and development agencies, in an insecure environment, by a deployed force whose primary mission is not the provision of humanitarian aid. Should the deployed force undertake such humanitarian tasks, responsibility should be handed over/returned to the appropriate civilian agency at the earliest opportunity. *(JWP 0-01.1)*

Humanitarian Operations
An operation specifically mounted to alleviate human suffering where responsible civil actors in an area are unable or unwilling adequately to support a population. It may precede, parallel or complement the activities of specialized civil humanitarian organizations. *(JWP 0-01.1)*

Information and Communication Services (ICS)
All the elements required to deliver support to the commander. *(New)*
CIS refers to equipment only

Information Operations
Coordinated operations undertaken to influence an adversary or potential adversary in support of political and military objectives by undermining his will, cohesion and decision-making ability, through affecting his information, information-based processes and systems while protecting one's own decision-makers and decision-making processes. *(JWP 0-01.1)*

Information, Surveillance, Target Acquisition and Reconnaissance (ISTAR)
The coordinated acquisition, processing and dissemination of timely, accurate, relevant and assured information and intelligence which supports the planning and conduct of operations, targeting, and integration of effects, and enables commanders to achieve their goal throughout the spectrum of conflict. *(New)*

Insurgency
An organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict. *(AAP-6)*

Interdiction
Actions to divert, disrupt, or destroy the enemy before he can affect friendly forces. *(JWP 0-01.1)*

Interoperability
The ability of Alliance forces and, when appropriate, forces of Partner and other nations to train, exercise and operate effectively together in the execution of assigned missions and tasks. *(AAP-6)*

Intervention
A campaign or operation with limited objectives, involving the entry of another state where opposition is expected. *(JWP 0-01.1)*

Joint
Adjective used to describe activities, operations and organizations in which elements of at least two services participate. *(AAP-6)*

Joint Fires
Joint Fires is defined as kinetic attack coordinated or directed at the operational level by the JTFC/NCC. *(New JWP 3-00)*

Joint Force
A force composed of significant elements of two or more Services operating under a single commander authorized to exercise operational command or control. *(JWP 0-01.1)*

Joint Operations Area (JOA)
A temporary area defined by a NATO strategic or regional commander, in which a designated joint commander plans and executes a specific mission at the operational level of war.
Note: it is defined in coordination with nations and approved by the North Atlantic Council or the Military Committee as appropriate, in accordance with NATO's Operational Planning Architecture. A joint operations area and its defining parameters, such as time, scope of the mission and geographical area, are contingency – or mission-specific and may overlap areas of responsibility. *(AAP-6)*

An area of land, sea and airspace, defined by higher authority, in which a designated Joint Task Force Commander plans and conducts military operations to accomplish a specific mission. A Joint Operations Area including its defining parameters, such as time, scope and geographic area, is contingency/mission specific. *(UK)*

Joint Operations Centre (JOC)
A joint agency normally set up at army/air force tactical group headquarters and organized for the purpose of exchanging information and for the coordination of the combat effort of the air forces in air support of ground operations. *(JWP 0-01.1)*

Joint Task Force Commander (JTFC)
The operational commander of a nominated joint force. *(JWP 0-01.1)*

Joint Task Force Headquarters (JTF HQ)
A purely national deployable joint headquarters of variable size commanded at the operational level by a Joint Task Force Commander. *(JWP 0-01.1)*

Land Tactical Activities
The broad range of tactical activity is divided into *offensive*, *defensive* and *stability operations* which, together with *enabling activities*, describe all military activity undertaken during a campaign. *(New)*

Offensive Operations
Operations in which forces seek out the enemy to destroy him. (*JWP 0-01.1*)

Defensive Operations
Operations that resist enemy offensive operations. *(New)*

Stability Operations
Operations that seek to stabilize the situation and reduce the level of violence. *(New)*

Enabling Activities
Tactical activities that link, support, or create the conditions for *offensive*, *defensive* and *stability operations*. *(New)*

Lead Nation
A lead Nation is one which assumes lead responsibility for the planning and execution of an operation, particularly retaining ownership of the Campaign Plan and Information Operations. The Joint Task Force Commander, staff, command, control, Communications and Information Systems structure, doctrine and logistic coordination of the force will be provided by one nation (the lead nation). Other nations can assign contributions to this force under a National Contingent Commander, with liaison officers, and might even fulfil some staff positions in the lead nation's staff. *(JWP 0-01.1)*

Levels of Warfare

Strategic
The level of war at which a nation or group of nations determines national or multinational security objectives and deploys national, including military, resources to achieve them. *(AAP-6)*

Operational
The level of war at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres or areas of operations. *(AAP-6)*

Tactical
The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical formations and units. *(AAP-6)*

Limited Intervention
Those operations that have limited objectives such as the rescue of hostages, security of non-combatants or re-establishment of law and order. *(JWP 0-01.1)*

Logistic Support
The sustainment of forces through provision of materiel including acquisition, control and distribution; provision of movement of personnel and materiel; and provision of logistic support services. *(New)*

Logistics
The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, the aspects of military operations which deal with:

a. design and development, acquisition, storage, transport, distribution, maintenance, evacuation and disposition of materiel;
b. transport of personnel;
c. acquisition, construction, maintenance, operation, and disposition of facilities;
d. acquisition or furnishing of services; and
e. medical and health service support.

(AAP-6)

Main Effort
A concentration of forces or means, in a particular area, where a commander seeks to bring about a decision. *(JWP 0-01.1)*

Manoeuvre
Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect of the enemy in order to accomplish the mission. *(AAP-6)*

Manoeuvre, Air
Operations within the land component scheme of manoeuvre, seeking decisive advantage by the exploitation of the third dimension; primarily supported by combined arms centred around and integrated with rotary wing aircraft, supported by other component elements, within a joint framework – nationally and multinationally. *(New)*

Manoeuvre, Scheme of
A short general description of the manoeuvre of subordinates in space and time. *(New)*
In land operations at the tactical level, the superior commander's concept of operations should include both his intent and his design for operations, normally expressed as a scheme of manoeuvre, and his main effort. *(JWP 0-01.1)*

Manoeuvre Support
Those activities, primarily military engineer actions, which contribute to shaping the battlespace to enable strategic, operational and tactical freedom of manoeuvre across the continuum of operations. *(New)*

Manoeuvrist Approach
An approach to operations in which shattering the enemy's overall cohesion and will to fight is paramount. It calls for an attitude of mind in which doing the unexpected, using initiative and seeking originality, is combined with a ruthless determination to succeed. *(JWP 0-01.1)*

Materiel
The stores and equipment (as opposed to personnel) available or required for an undertaking. *(JWP 0-01.1)*

Military Aid to the Civil Authority (MACA)
The collective term given to the three types of operations which may take place in a civilian environment ie MACC, MACM and MACP. *(Implicitly, such operations will only be conducted in UK) (JWP 0-01.1)*

Military Aid to the Civil Community (MACC)
The use of unarmed Servicemen to provide help in natural disasters and emergencies and to provide more routine assistance in the creation and development of local community projects, and of individual assistance by volunteers in the social service field. *(JWP 0-01.1)*

Military Aid to the Civil Ministries (MACM)
The use of unarmed Servicemen on urgent work of national importance, to maintain essential services and supplies, most usually (but not uniquely) when they are disrupted by industrial dispute. The Servicemen act under military orders and any protection needed is provided by the civil police. *(JWP 0-01.1)*

Military Aid to the Civil Power (MACP)
The use of troops in formed bodies, often armed, to assist the civil power in the maintenance of law and order. *(JWP 0-01.1)*

Mission
A clear, concise statement of the task of the command and its purpose.

One or more aircraft ordered to accomplish one particular task. *(AAP-6)*

Mission Command
A style of command that seeks to convey understanding to subordinates about the intentions of the higher commander and their place within his plan, enabling them to carry out missions with the maximum freedom of action and appropriate resources. *(JWP 0-01.1)*

Mobility
A quality or capability of military forces which permits them to move from place to place while retaining the ability to fulfil their primary mission. *(AAP-6)*

Multinational
Adjective used to describe activities, operations, organizations etc in which forces or agencies of more than one nation participate. *(AAP-6)*

National Contingent Headquarters
The national HQ deployed alongside a CJTF HQ, or another multinational theatre HQ, for the purposes of executing national command over UK deployed forces. With the exception of the lead nation, each country contributing forces to a multinational operation can be expected to deploy a national contingent commander (NCC) who will exercise national command and represent national interests at the operational level. *(JWP 0-01.1)*

Network Enabled Capability (NEC)
Linking sensors, decision-makers and weapon systems so that information can be translated into synchronized and overwhelmingly rapid military effect. *(New)*

Network Enabled Battle Command (NEBC)
At the operational and tactical levels NEBC seeks to use enhanced communications, information technologies and ISTAR to support better decision-making, leadership and control. All levels of command should benefit from more informed decision-making, faster tempo, better synchronization of actions across boundaries, and less friction in execution. *(New)*

Non-Combatant Evacuation Operation (NEO)
An operation conducted to relocate designated non-combatants threatened in a foreign country to a place of safety. *(AAP-6)*

Objective
The physical object of the action taken, eg a definite tactical feature, the seizure and/or holding of which is essential to the commander's plan. *(AAP-6)* See *aim* and *mission*

Operation
A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defence and manoeuvres needed to gain the objectives of any battle or campaign. *(AAP-6)*

Operational Analysis
The use of mathematical, statistical and other forms of analysis to explore situations and to help decision-makers to resolve problems. Facts and probabilities are processed into manageable patterns relative to the likely consequences of alternative courses of action. *(JWP 0-01.1)*

Operational Art
The orchestration of all military activities involved in converting strategic objectives into tactical actions with a view to seeking a decisive result. *(JWP 0-01.1)*

Operational Capability
The potential of the Armed Forces to achieve success in relation to a specific operation. *(New)*

Operational Framework
A means of visualizing operations and aiding coordination, the framework is used to describe how the missions of subordinates relate to each other by *time, space, function* and *purpose*. It should be primarily viewed in terms of the *purpose* of the forces involved: what is considered will be *decisive*, and how other actions relate to that by *shaping* conditions or *sustaining* the force. It is most commonly used in the description of courses of action, and hence concepts of operations. *(New)*

Decisive Operations
The decisive operation in a commander's plan should inevitably lead to the achievement of the assigned mission and thereby success in his chosen concept of operations. There should only be one decisive operation in a plan. *(New)*

Shaping Operations
Shaping operations create or preserve the conditions for the success of the decisive operation. Those conditions relate to the enemy, the environment, and to own or friendly forces. *(New)*

Sustaining Operations
Sustaining operations enable land forces to live, to move, and to fight in order to conduct decisive or shaping operations. They include CSS and force protection activities. *(New)*

Peace
A condition that exists in the relations between groups, classes or states when there is an absence of violence (direct or indirect) or the threat of violence. *(JWP 0-01.1)*

Peace Building
A peace support operation employing complementary diplomatic, civil and – when necessary – military means, to address the underlying causes of conflict and the longer-term needs of the people. It requires a commitment to a long-term process and may run concurrently with other types of peace support operations. *(AAP-6)*

Peace Enforcement
A peace support operation conducted to maintain a cease-fire or a peace agreement where the level of consent and compliance is uncertain and the threat of disruption is high. A Peace Support Force must be capable of applying credible coercive force and must apply the provisions of the peace agreement impartially. *(AJP-3.4)*

Peacekeeping
A peace support operation following an agreement or ceasefire that has established a permissive environment where the level of consent and compliance is high, and the threat of disruption is low. The use of force by peacekeepers is normally limited to self-defence. *(AAP-6)*

Peacemaking
A peace support operation, conducted after the initiation of a conflict to secure a ceasefire or peaceful settlement, that involves primarily diplomatic action supported, when necessary, by direct or indirect use of military assets. *(AAP-6)*

Peace Support
A peace support operation impartially makes use of diplomatic, civil and military means, normally in pursuit of United Nations charter purposes and principles, to restore or maintain peace. Such operations may include conflict prevention, peacemaking, peace enforcement, peacekeeping, peacebuilding and/or humanitarian operations. *(AAP-6)*

Peacetime Military Engagement (PME)
All military activities involving other nations that are intended to shape the security environment in peacetime. *(New)*

Permanent Joint Headquarters
The HQ of the Chief of Joint Operations (CJO) located at Northwood in North London. All UK joint operations are commanded through the HQ, with the in-theatre commander reporting to the Joint Commander at PJHQ. For most operations the designated Joint Commander will be the 3 Star CJO himself. However, the option is retained of appointing one of the 4 Star single Service CinCs as the Joint Commander if the scale and nature of the operations being commanded warrant a more senior officer in the chain of command.

Power Projection
The threat or use of joint military capabilities and other instruments of national power, at global range, to achieve strategic effects in support of national policy objectives.

Pre-Emption
To pre-empt the enemy is to seize an opportunity, often fleeting, before he does, in order to deny him an advantageous course of action. *(JWP 0-01.1)*

Principles of War
The Principles of War are guides to action and fundamental tenets forming a basis for appreciating a situation and planning, but their relevance, applicability and relative importance change with circumstances. *(JWP 0-01.1)*

Rapid Reaction Forces (RRF)
NATO Reaction Forces at longer readiness than Immediate Reaction Forces (IRF) and available to respond to a crisis which exceeds the capacity for IRF to deter or counter. *(JWP 0-01.1)*

Reachback
Increasing use of deployed broadband communications will reduce the geographic constraints on information flow. Deployed forces can exploit this by reaching back to supporting HQs and organizations to access quality information services and advice. The development of reachback facilities will increase functionality while reversing the trend of increasing HQ size thereby improving deployability and mobility. *(New)*

Reaction Forces (RF)
Highly mobile and capable multinational land, air and maritime forces allocated to major NATO commands and available at short notice, in order to provide an early military response to a crisis and demonstrate NATO's cohesion and resolve and, if required, facilitate the timely build-up of forces in the crisis area. They

are composed of smaller Immediate Reaction Forces, and more capable Rapid Reaction Forces, both with maritime, ground and air components. *(NATO)*

Readiness
The time within which a unit or formation can be made ready to perform unit-type tasks. This time is amplified or measured by indicators of its current personnel, materiel and training state. The time does not include transit time. *(JWP 0-01.1)*

Recognized Environmental Picture (REP)
The total set of shared Environmental Information on a particular operation, or Joint Operations Area (JOA), available through a secure information environment on CIS networks to support Situational Awareness and decision-making by commanders, and facilitate information sharing with allies and partners. *(New)*

Reconnaissance
A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data about meteorological, hydrographical or geographic characteristics of a particular area. *(AAP-6)* See *Surveillance*

Restoration
The ability to restore combat power which comprises three elements:

Regeneration
The strategic activation of existing force structures and dormant capabilities.

Reconstitution
The strategic level expansion of force structures and infrastructure.

Rehabilitation
The operational or tactical level post-combat phase of refurbishment and replenishment.
(New)

Roulement
The rotation of personnel or units in the front line with those in reserve in order to maintain the fighting effectiveness of the forces engaged in an operation. *(JWP 0-01.1)*

Rules of Engagement (ROE)
Directions for operational commands that set out the circumstances and limitations under which armed force may be applied by UK forces to achieve military objectives for the furtherance of UK government policy. ROE are thus issued as a set of parameters to inform commanders of the limits of constraint imposed or of freedom permitted when carrying out their assigned tasks. They are designed to ensure that any application of force is appropriately controlled. *(JSP 398)*

Shock Action
The sudden, concentrated application of violence. *(New)*

Simultaneity
Element of campaign and operational design that seeks to disrupt the decision-making process of the enemy commander by confronting him with a number of problems simultaneously. *(JWP 0-01.1)*

Situational Awareness
The understanding of the operational environment in the context of the commander's (or staff officer's) mission (or task). *(JWP 0-01.1)*

Spectrum of Conflict
The full range of levels of violence from stable peace up to and including general war. *(JWP 0-01.1)*

Stability Operations
A stability operation is defined as an operation that imposes security and control over an area while employing military capabilities to restore services and support civilian agencies*(New)*

Strike
An attack which is intended to inflict damage on, seize, or destroy an objective. *(AAP-6)*

Supported Commander:
A commander having primary responsibility for all aspects of a task assigned by a higher authority. *(JWP 0-01.1)*

A commander having primary responsibility for all aspects of a task assigned by a higher NATO military authority and who receives forces or other support from one or more supporting commanders. *(AAP-6)*

Supporting Commander
A commander who provides a supported commander with forces or other support and/or who develops a supporting plan. *(AAP-6)*

Surveillance
The systematic observation of the aerospace, surface and sub-surface areas, places, persons or things by visual, aural, electronic, photographic or other means. *(AAP-6)*

Sustainability
The ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives. *(AAP-6)*

Sustainment
The combination of logistics, administration, resources and organization to deliver sustainability. *(New)*

Sustainment Reach
The limit at which a force can assure sustainment. *(New)*

Synchronization
The focusing of resources and activities to produce maximum combat power at the decisive time. *(JWP 0-01.1)*
Synchronization differs from *simultaneity* as the purpose is to achieve decisive coincidence of the effects of activities rather than the activities themselves.

Tempo
The rate or rhythm of military activity relative to the enemy, within tactical engagements and battles and between major operations. It incorporates the capacity of the force to transition from one operation of war to another. *(JWP 0-01.1)*

Theatre of Operations
A geographical area defined by the military-strategic authority which includes and surrounds the area delegated to the operational commander within which he will conduct operations – known as the joint operations area. *(JWP 0-01.1)*

OFFICIAL SOURCE DOCUMENTS

NATO Doctrine

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AJP-01	*Allied Joint Doctrine*
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ATP 3.2.1	*Command and Control of Allied Land Forces*

Joint Doctrine

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JWP 3-00	*Joint Operations Execution* (Second Edition)
JWP 3-50	*The Military Contribution to Peace Support Operations* (Second Edition)
JWP 3-51	*Non-Combatant Evacuation Operations*
JWP 4-00	*Logistics for Joint Operations* (Second Edition)
JWP 4-03	*Joint Medical Doctrine*
JWP 5-00	*Joint Operations Planning*

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AP 3000	*British Air Power Doctrine* (Third Edition)

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AC 71344 Army Field Manual Volume 1, Part 6, *Combat Service Support* (Issue 3.0)
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